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MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

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MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

EDITED BY

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OF

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I.—PSYCHOLOGY AND PHILOSOPHY.

I desire to offer, in the following pages, some remarks on a question that has found definite expression from the time of Kant, if not earlier, and that claimed attention before now in a journal calling itself a Review of Psychology and Philosophy. Though not wholly passed by in the few words of general preface with which MIND was started seven years ago, the question how Psychology and Philosophy are related to one another, so as to be coupled at all and coupled in this particular order, deserves at this time a more careful consideration. But, after an editorial experience of so many years, a preliminary word or two of retrospect over the course that is past will not be thought irrelevant to the present discussion. How far does experience seem to have justified the idea of founding a philosophical journal in England and making it in the first place psychological?

I will not conceal my own feeling of disappointment that there has not been more of positive contribution to psychological science in its pages. If they have faithfully reflected the amount of psychological activity in the country, it cannot be said that this has been appreciably increased in the last seven years, because of the opportunity here afforded to any psychologist of bringing the results of his inquiry under the notice of other students. The Journal has not yet suc-

ceeded in fostering—if it might have been expected to foster —such habits of specialised investigation in psychology as are characteristic of the workers in other departments of science. There is little sign in our midst of the disposition (or, perhaps, the ability) to work on such special lines of psychological research as other countries give evidence of.[1] Investigations like those which are being systematically pursued at Leipsic and elsewhere in Germany are not yet undertaken in any of our universities or colleges; and monographs on particular phases of mental life have been notably more frequent of late in France (as well as in Germany) than in this country.[2] The reason is, perhaps, not far to seek. Our academic posts are few altogether, and have in general such multifarious duties attached to them as do not favour the concentration required for this kind of work. But the disposition is, after all, the main thing, and here it is to be noted that in so far as it is still the influence of what is called the "English Psychology" that maintains the interest there is amongst us in the positive investigation of mind, this does not tell in the way of stimulating to special inquiry. For all the name it has made in the world, English psychology has never been remarkable for its elaboration in detail. Some few special questions it has been led by historic circumstances, if not by accident, to investigate in a more thorough way; but in the main its reputation has been founded on the enunciation of general principles which, while directly psychological in their import, have been thought of rather for the philosophical application to which they appeared to lend themselves. Treatises on Man or Human Nature, Essays or Inquiries on Understanding generally, Analyses of Mind in all its aspects —these have formed the staple of English productions in this field. So, at the present time, it is rather the reconsideration of the psychological point of view, whether in reference to philosophy or in reference to the range of mental inquiry as newly enlarged by the biological principle of evolution; or it is the revision of the whole psychological field with a view to including and ordering the great mass of new facts that have been brought to light, chiefly from the physiological side; or, again, it is the application (too long delayed) of psychological principles to the practical

[1] Exception should be made for Mr. F. Galton's researches on Generic Images and on Automatic Representation, noticed in MIND XVI., 551, the former of the two being followed up by him in MIND XIX., 301.

[2] Mr. Gurney's elaborate *Power of Sound* is one instance of the kind of special treatise here meant; Mr. Sully's *Illusions* is another.

work of education—it is these various tasks that are now engaging the attention of those who set store by the tradition of "English Psychology". But there is other work to be done also, and we shall soon fall too far behind in the scientific race if we have not our own record of positive results to show.

Otherwise, it may perhaps be claimed that the past volumes of MIND have not succeeded one another to no purpose. They have kept English readers, for the last seven years, better informed than they would else have been of the psychological and philosophical movements in other countries, and they have given a representation that cannot be called other than impartial of the manifold currents of thought running among the English-speaking race here and in America. If at times some forms of opinion have seemed to assert themselves more than others, the fault lay with the others that chose to assert themselves less. It became clear from the beginning that the number of English thinkers, at the present day, who cared to have a clearly defined psychological basis was very small: not that any can be without their psychology, but that most are of opinion either that it supplies no basis for philosophical consideration or that they can get on very well without thought of it. All who had anything serious to say have, therefore, from the first been encouraged to deliver themselves of their message, whatever it might be; and while I reflect with satisfaction that the chief opponent, in this generation, of the English philosophical tradition was using the Journal for the exposition of his matured conclusions when a cruel fate snapt on a sudden the thread of his life, I can truly say that no philosophical contribution offered has ever been declined on the ground of its being of one cast of thought rather than of another. As this has been the rule in the past, so is there a fixed determination that it shall be in the future. Nor does comprehensiveness of this kind mean philosophical indifference—the absence of all conviction in one who seeks to practise it. It may, perhaps, be taken rather as a sign of understanding that in philosophy there is room for differences of view, which need clearing in relation to one another while they remain differences. There is urgent need, in the present state of philosophical speculation, for that free and direct interchange of thought from opposite sides which MIND has done something to promote and may yet do more. Mutual understanding—not agreement—is the object to be first striven for. It is with some thought of helping in that direction that the following pages are now written.

When Psychology is distinguished from Philosophy and the question is raised whether there is any special relation of the one to the other, it is Empirical Psychology that is to be understood—the science of mind worked out in the way of the natural sciences, if not regarded as itself one of them: Rational Psychology has always been taken as philosophical or nothing. Now of empirical psychology Kant, in a well-known passage near the close of the *Kritik d. r. V.* ('Architectonic of Pure Reason'), has declared that it is nothing to philosophy proper or metaphysic, any more than the empirical study of nature is; or that if it may continue to get a little attention from the philosopher, this is only upon sufferance, and until it is taken vigorously in hand by the specialist and turned into Anthropology, as a complete scientific doctrine of man.

It is a remarkable saying of Kant's, and not least remarkable is the prospect held out of a wider science of man within which any scientific psychology must fall. The declaration as to Anthropology proves—more than his own treatise on this subject, full of genuine observation as it is—how thoroughly he understood what work had to be done in the way of science for a comprehension of human nature: no mere collecting and sifting of objective facts, but also work of psychological (subjective) analysis conducted according to the methods of positive scientific inquiry. Nor in denying philosophical import to psychology, was Kant in the least unaware of the special claims that might be set up for the science in this respect. He begins the passage by a reference to the expectations which in that very age had been formed, that psychology might be able to achieve for metaphysical insight what the method of *à priori* speculation was being abandoned for having failed to effect. Kant, we know, had himself for a time shared the opinion, borrowed from German psychologists of that day, like Tetens and others, more perhaps than from Hume and Locke, that a scientific doctrine of mind must be placed first in any philosophical discipline. But also from Locke and to some extent from Hume (at least Hume of the *Inquiry*) he had had occasion to learn what they had to urge to the same effect; and if, in the end, he declares roundly that metaphysic has nothing to do with psychology, it is done with his eyes hardly less open than if he had had before him all that later psychologists of whatever different schools—British or Continental—have since sought to demonstrate to the contrary. At the same time, it is of interest as well as to the point to remember that Kant himself lies under

the imputation of remaining too much influenced by the idea with which he was once infected that psychology is the foundation of all genuine philosophy. If some regret that he ever outgrew the idea and did not spend himself in giving it effect, others find in the rags and tatters of psychological doctrine which he could never throw off the explanation of all his shortcomings as a philosopher.

It is certainly to Locke that we must go back to find the beginnings of the opinion that philosophy should start from what is now called (though Locke did not call it) psychological inquiry. There is in Hobbes, in the previous generation, more express inquiry of the psychological sort, but not pursued with any such directly philosophical purpose. Locke, with the definite aim of furnishing a theory of the validity and limits of knowledge, elects to proceed by what he calls the "plain historical way" of a consideration of its origin; in other words, he seeks to solve the philosophical question of the import of knowledge by reference to the psychological question of its coming-to-pass. The idea worked so powerfully that, in the next generation, we find Berkeley solving the religious question of the relation of the creature to the Creator through a philosophical theory of knowing and being suggested by a special inquiry in the psychology of vision; and Hume, in turn, declaring that, while even such sciences as mathematics are in a manner dependent on the science of man, this is still more true of properly "philosophical researches," which can be conducted only after a scientific understanding of human nature, to be attained by the same way of "experience and observation" as had been found effective in other sciences. When Hume thus wrote, Locke's idea of psychological inquiry had been caught up in a still more positive spirit by Hartley, and through Hartley more than Hume it has worked upon those who in this century have advanced farther upon the way of thinking that has become stamped as characteristically English. Even the reaction against Hume's philosophical conclusions, in Scotland, started from a not less emphatic assertion of the need of resting philosophy upon an inductive science of mind; and meanwhile, by the middle of last century, Locke's idea was being ardently worked out also in France, Germany, and Italy. It was thrown into the shade by the Kantian conception of Critical philosophy and remained in abeyance during the whole period of eager speculation that followed; but all the while, in Germany, psychology was making way as positive science by the labours of Herbart and his school, and in time it came again,

first through Beneke (under the direct influence of Locke) and afterwards in connexion with the forward movement of physiological science giving a new definiteness to psychological results, to be regarded as of special significance for philosophy.

What is, then, the exact import of the idea thus introduced by Locke into the stream of philosophical thought? It is (so far as philosophy turns upon the problems of knowledge) that, before attempting to determine what can be known ultimately of things, investigation shall be made of the human faculty of knowing by the same method that has been found effective in the region of the positive sciences. Locke was deeply impressed by the scientific achievements of his century, culminating in the work of Newton, and, while declaring that for himself philosophy is turned from direct speculation about things into general theory of knowledge as complementary to the special sciences, he is most of all decided on the point that such philosophical theory can be wrought out only after scientific account has been rendered of mind. This is his really characteristic idea; for the conception of philosophy as theory of knowledge in relation to the sciences is equally proclaimed by Kant later and had already been shadowed out earlier by Descartes. To arrive at philosophical conclusions that might the more readily command assent because drawn from a basis of properly scientific results about mind, which could no more be contested than any results of mathematical or physical science—such is the idea of Locke and his followers. It gets the pointed expression before quoted from Hume, and it has determined the form of all homespun English thought ever since. It is not that in putting psychological considerations in the front the English thinkers have eschewed the work of philosophy; for they have never hesitated to pronounce on ultimate questions, it being rather their conception of the range and limits of psychology that has remained uncertain. But there has been a common persuasion among them that there is need of a definite scientific platform from which to start upon the search for philosophical comprehension, if anything that can be called knowledge—more than subjective opinion—is to come of the quest. So far, again, as philosophy is to provide guidance as well as insight—has in view not only rational interpretation but conduct and aspiration—here also the thought has been that beginning should be made with scientific investigation of the processes of feeling or impulse natural to man.

The idea, however, is one thing, and another thing is the

carrying of it out. It may be possible, as we shall see, to maintain in the present scientific era the advantage or even necessity of basing philosophical consideration upon psychological inquiry, and yet it may be allowed that the idea, as originally struck out at another time of strenuous advance in science, has never hitherto been circumspectly enough put in practice. Locke and his followers to the present day have proceeded in a manner that has laid them open to a kind of criticism that apparently makes an end of their pretensions to rank as a serious philosophical school. The criticism directed by Green against Locke and Hume tells also, as it was plainly meant to tell, against Mill and others in this generation who, working at philosophy from the standing-ground of psychology and making whatever progress in either department, have been hardly more careful than Hume or Locke to draw a clear line between natural science of mind (or man) and the ulterior consideration of things in relation to mind. The point of the criticism urged by Green (after Kant), with a massive persistence that stamps it as an original philosophical achievement, is too well-known—repeated as the argument has lately been in these pages—to need more than general indication. Locke and the others are charged with assuming for the explanation of mental experience that which is itself unintelligible except as the result of a mental function. They would account for mental experience, including thought, by supposing a world of 'objects' acting upon a mind or a multitude of minds, when it can be shown that the very things or objects assumed are themselves mental constructions dependent on the activity of that thought which is in this way to be explained. The moral is that in no such way as the English school has trodden can the work of philosophy be performed, but only by a path at least as different as that which Kant had in view, when he scouted the notion that the least philosophical importance could be attached to psychological (or anthropological) science.

So far as it bears against Locke in particular, the criticism, it must be allowed, is not to be repelled,—if it were anybody's business at this time of day to defend the language or the thought of his *Essay*, so wavering and uncertain as both plainly are. Indeed, it is one view to take of the work of his immediate successors, Berkeley and Hume, that they did something to obviate, by anticipation, the objections that can be urged with incontrovertible force against his shifting positions. But neither did Berkeley

and Hume define their ground with sufficient care, nor proceed far enough in the way of systematic construction, to evade the criticism as it was to be levelled also against them. Berkeley with his religious and Hume with his dialectical aim had neither of them in view, to the same extent as Locke himself, a positive solution of the philosophical problem of knowledge in keeping with the facts of psychological science. If no more could be said for the new method in philosophy than they were at pains to urge, there was need enough for Kant's newer way. As for the later English thinkers, if they continued to maintain the psychological starting-point, they were bound at least to bring their doctrine face to face with Kant's theory of knowledge *in detail*, since never before, from any point of view, had the work of philosophical analysis been carried so far. Their failure to do this has, more than anything else, weakened the impression that might otherwise have been wrought by the signal advances they have made or rendered possible in constructive interpretation beyond their pre-Kantian compatriots. And thus the hostile criticism directed against these has seemed by no means wanting in point against themselves. Can it in any way be met?

Those who would still in these days cling to the English tradition or rather uphold the idea of it all the more in the changed conditions of the time—changed alike by the widened scientific inquiry and by the deepened philosophical thought of the last hundred years—may (as it seems to me) materially strengthen their position by making more express distinction of Psychology and Philosophy than has been usual in this country. It is a mistake to think of psychology, because it is concerned with mind, or natural science of man, because it deals with man, as meeting all the requirements of philosophy. Nor is the difficulty met by such a vague use of the word Metaphysics as satisfied Mill (as well as Hamilton and Mansel): the name is misleading when applied to psychology, and confusing when it is held to justify the conjoint treatment of epistemological or ontological with psychological questions. 'Philosophy of Mind' or 'Mental Philosophy' might seem to lend itself better to the double use, because it may stand for psychology like 'Natural Philosophy' (in the English usage, after Newton) for physics, while opening at the same time a vista of ulterior or deeper consideration in the word Philosophy; but nothing is gained by the attempt to combine under one designation what it is of the first importance, for clearness of view, to separate. Till psychology and philosophy are

kept well apart, neither the one nor the other can have full justice done to it. Any advantage there may be in passing to the one through the other is certainly imperiled, if there is the least pretence made that the psychology is already philosophy. Let us, first, try to define the true character and position of Psychology, and if we find it to be science of altogether exceptional scope, bringing it into special relation with philosophy, let us next determine the meaning that may be attached to Philosophy in relation to psychology.

Psychology, by itself, is, in the first instance, positive phenomenal science—positive as to its method, phenomenal as to its subject-matter. Its method does not differ from that of other positive sciences, like biology or chemistry, except as the method of any science is modified by the peculiarity of its subject. As phenomenal science, it is occupied with a particular class of facts, taken just as they present themselves. Phenomenal facts are appearances (aspects) of things, or occurrences in things as they appear. What is the meaning of 'thing' or 'appearance' or 'aspect' —these are questions which the particular science dealing with any class of facts leaves wholly aside. In so proceeding, the sciences may all be said to begin quite arbitrarily, because the questions are real and remain open; but the method is justified by the results. It is notorious that all the positive sciences, from mathematics onwards, have become constituted and made way just as they have cut themselves loose from that kind of deeper inquiry. Psychology, too, is science only upon those terms. Not that, in placing it thus far on a level with the other sciences, we commit ourselves to the position that mind is merely such another aspect of things after life (the subject of biology), as life is after material constitution (the subject of chemistry), or material constitution is after motion (the subject of physics). It will presently be argued that there is something in Mind, as the subject-matter of psychology, unlike anything else, that suggests the need of some other kind of consideration; while the fact, evident from the first, that the events or states (or however they are called) which psychology investigates, are apprehended only in the peculiar attitude of introspection, makes already a profound difference. Still there is a definite sense in which we may speak of mental phenomena as of vital, structural or other phenomena; and in this sense, we are entitled, nay bound, from the scientific point of view, to make all necessary assumptions, were it only to get language in which to state our results.

The psychologist seeks to assign the natural conditions

under which mental experience, as we are each (subjectively) aware of it, arises or comes to pass. For this he as readily assumes 'objects' (in the sense of material things) as any other man of science, and with as little prejudice to the deeper question what an 'object' is or how it can be known. It is plain fact that, but for the presence of what we call external objects in relation with the bodily organism (another object, also in its way external), certain of the mental events which the psychologist has to study—those that are called by the general name of Sense—do not come to pass. There is no way of rendering a scientific account of these (that shall be more than a bare subjective description) except in terms of the physical circumstances plainly involved. The circumstances, when more closely examined, are found to consist of physiological processes in an organism, in relation with such physical processes as science discovers upon resolution of the 'objects' of our common or natural experience. Advanced so far as to substitute the exacter expression for the vague opinion of common life that our bodies are somehow implicated with other bodies in the production of conscious experience, the psychologist has then obtained a definite clue for the scientific resolution of the whole complex of mental experience which offers itself to introspective observation. Those facts of mental life (subjectively apprehended) are first to be dealt with where there is clear evidence of physiological process that can be assigned, and afterwards those where the physical conditions are of a more hypothetical character but can yet be imagined in continuity with those that are more evident; the same order of treatment (from Sense, through Perception and Representative Imagination, to Thought), once it is thus suggested, being confirmed by reference to the historical development of the individual and the race. Nor are the results arrived at less purely psychological because of the regard had to physical conditions. It is not the mere fact of natural concomitance between physical event and mental event that is in this way to be established, though it is of scientific interest and importance to ascertain the particulars of such concomitance, as a subsidiary result of the inquiry. The psychologist's reference to physical conditions, so far as it can be carried through, is everywhere made for the elucidation of the facts of subjective consciousness. It is these that he aims at classifying with a view to explanation, and the explanation consists at last in the establishment of laws of mind—laws which are 'natural,' but still of subjective import. There is thus a perfectly legitimate 'natural science' of mind (or

man), against which, so long as it gives itself out for nothing else, there lies no more objection than against any other positive science. It is a legitimate and also, from any point of view, a necessary task to determine the conditions under which and the manner in which our conscious experience (as introspectively observed) *naturally* proceeds. The circumstance that the peculiar attitude of introspection must be taken up before the facts to be accounted for are apprehended, complicates the inquiry with special difficulties but does not alter the methodological conditions under which it may, and (if it will be scientific) must, be pursued.

But if psychology is thus, in its way, natural science, it is more also, or rather it leads to more. Mind, however it may be taken as the name for a peculiar class of (subjective) phenomena in relation with other (objective) phenomena, has also a wider implication. The 'other phenomena'—meaning such 'objects' or objective appearances as physical science investigates out of all relation to the fact of their appearing—have, as the very name 'phenomenon' implies, their mental aspect. They may be viewed as themselves part of our mental experience: not that this can happen at the moment when they are being taken as the physical conditions of the subjective facts which as psychologists we are for the time investigating, but that they can in turn be considered as subjective facts to be investigated. The object (physically understood) which as acting upon the organism gives the only means of stating in scientific terms how we come, naturally, to have such a subjective experience as we call sensation, cannot fail, in the course of the inquiry, to appear as itself also matter for psychological consideration. To be regarded as the condition of our having, in certain circumstances, the particular kind of conscious experience called sense, it must come within conscious ken; that is to say, it admits of statement in terms of another kind of conscious experience, called perception, which has equally to be treated by the psychologist. Or the case may be put otherwise, thus. The psychologist, in giving account of sensation as a rudimentary kind of subjective experience, has to face the question how sensations appear all, more or less, as objectively referred or projected in an extended order —some appearing so much as sensible qualities of external bodies that it is only by an express effort that they can be thought of as sensations, others appearing indeed as sensations but thought and spoken of as 'bodily' from being either localised definitely on the surface of the organism or vaguely referred to some internal part. This is the *psychologi-*

cal (as opposed to the philosophical or metaphysical) question of Perception, admitting, when so stated, of a strictly scientific solution. But what a transformation does such an extension of the psychologist's view not work! Not a single physical object or fact, as given in common experience or investigated in natural science, or again as assumed for psychological science itself, but now presents itself as a problem to be solved in terms of properly psychological, which is to say, conscious experience. There is, obviously, no science like this Psychology, whose subject-matter, however at first distinguished from that of other sciences, is seen, as we advance, to include (in a manner) the subjects of them all; which begins with assumptions like the other sciences, but after a time turns round and investigates its own assumptions as no other science does or can. Mathematics, physics and all the rest do each their appointed work and have nothing to say to the conditions under which their own or the others' work is appointed. Psychology alone, in doing its work, finds itself occupied (in a manner of its own) with the very matter of the others. Number and space, motion, material constitution, with every other aspect of things that is or can be conceived to be the subject of direct positive investigation, are in all their varied modes at the same time facts of conscious experience—in all strictness, *mental* phenomena, of whose elements and composition account may be rendered from the psychological point of view. If such account may be given, how can Psychology be spoken of as if it were only one among the other sciences, touching the philosopher, who comprehends things universally, no more nearly than any other? Psychology is not philosophy, but with Mind for its subject its scope cannot be less wide than the scope of philosophy. That is not to be said of any other science.

It is no wonder, indeed, that psychologists have slipped into philosophical consideration as other men of science have not, or that those philosophers who set store by scientific psychology have not been too careful to distinguish and separate the one kind of consideration from the other. If philosophy is, on the theoretic side, the comprehension of things as known, and, on the practical side, the valuation of things as ends to be striven for, what more natural than that the scientific investigation of the various phases of our complex mental life—distinguished, so far as they can be distinguished, under such heads as knowing, feeling and willing—should be mixed up with or have mixed up with it the philosophic inquiry? The conjunction is much to be

deprecated, when we see how it gives occasion for groundless objections against the method of psychology as science. It is equally to be deprecated, if it can be shown to impede the free exercise of philosophical thought. But the fact that psychology and philosophy so readily intertwine is surely an indication of some special affinity between them. Let us now take up the question of their relation from the side of Philosophy. We have seen psychology refuse, because of its subject, to be classed as merely one science among the others. How shall we understand Philosophy in relation to the sciences generally, and more especially in relation to that science of psychology whose scope widens out into an all-comprehensiveness vying with that of philosophy itself?

Locke, who first, in whatever inarticulate fashion, proclaimed the necessity of starting with psychology, had a clear notion of the function of Philosophy in general, which his followers have too much lost sight of, some in their efforts to improve his psychological ground-work, others in their predominant concern to work out special theories of ethics or of logic from psychological data. If we discount Hume's *Treatise of Human Nature* because of its equivocal import, there has not been since Locke's *Essay* any work of comparable range in general philosophy produced by an English thinker from the psychological point of view. Beyond psychology, English thinkers have occupied themselves mainly with Ethics, till Mill in his *Logic* essayed the special philosophical task of providing a theory of scientific proof; or if the present day has witnessed more than one notable achievement in general philosophical construction, these have not been projected directly, if at all, upon Lockian lines. Locke's notion of philosophy is of a general Theory of Knowledge wrought out, with psychological data, as complementary to the positive sciences. While this or that science is concerned with a particular department of experience or aspect of things as we find them, it is the business of philosophy to investigate the possible range of experience, to distinguish between what can and what cannot be known, and in particular to determine the conditions and content of real knowledge—all upon foregone psychological inquiry of the positive sort. Now this is the view of philosophy (on its theoretic or speculative side) that will force itself most directly upon anyone who, being interested in mind as a subject of science among other subjects of science, cannot help seeing that mind has also a deeper implication which no positive science can resolve.

Apart from any question of psychology, it is notorious that

(speculative) philosophy has in modern times changed its character from a theory of Being into a theory of Knowing. This has been mainly due to the rise and development of the positive sciences, as appears not less clearly in Kant's than in Locke's statement of the philosophical problem. The sciences are there as so many bodies of coherent doctrine about this or that kind of fact. The more special of them presuppose and are advanced by help of the more general, but, as has been already remarked in another connexion, not one of them (always excepting psychology) has any light to throw upon the matter or assumptions of the others. They employ a language which none of them (unless, again, psychology) is in any way able to explain: 'object,' 'thing,' 'substance,' 'quality,' 'aspect,' 'phenomenon,' 'relation,' 'cause,' &c., &c.—how can any of the sciences proceed without the use of such words as these, but which of the sciences has any account to give of them? Clearly, then, there is just as much need of a theory of the conditions of knowing anything as there is of a theory of this or that kind of thing. The theory of this or that kind of thing (as found) is what we call a science. The farther indispensable theory of what the meaning of science or any kind of knowledge is, may or must be called Philosophy. So far all are agreed who will think of philosophy in relation to science; and not only (though more) in modern times, for, with a less definite conception of special science, Aristotle also had his view of 'First Philosophy' as general theory of knowledge. Consider now the science of psychology in particular. Psychology also, as dealing with a special kind of fact, needs to be supplemented (as science) by philosophical consideration. But psychological fact includes the very function of knowing, which is the subject of philosophy. A different statement of the relation of philosophy to psychology is, then, required than in the case of other science. There it was enough to say that philosophy has the task of analysing to the bottom the conceptions and assumptions which the sciences generally or any sciences in particular employ without being able to give account of them; being thus fundamental theory of science while science is theory of things as they appear. Here, where the particular science (psychology) and philosophy have both to do with the fact or function of knowing, the statement must be that they have a different kind of account to give of it. And there is room for such difference. When psychology has explained knowledge as a phase of conscious experience naturally

conditioned, there remains for philosophy the question of its import or validity as knowledge.

The distinction may, first, be made plain by an example. As we have already had occasion to note, the psychologist is met at the earliest stage of his inquiry, when treating of sense, by the remarkable fact that sensations, which he must regard by themselves, analytically, as purely subjective states of feeling (arising in physical and physiological circumstances that can be assigned), do yet appear in actual experience with varying characters—some vaguely and others definitely referred to parts of the physical organism, while still others are projected so as to appear naturally as qualities of external things. We need not pause now to state the case in all its variety more exactly: it is met by the psychological distinction of perception (sense-perception) from sensation, perception being a cognitive or intellectual process resulting in what are best called percepts. A percept is a particular fact of intellectual experience, as singled out for investigation—when it can be proved to be essentially complex, however apparently simple. Now in any such percept, as, for example, a definitely limited portion of space, or a particular object in space with a variety of sensible qualities, the psychologist's interest ends when he has shown what elements (not farther analysable) of sense it involves and under what laws these come to be so ordered or fused as they appear in natural experience. The psychologist's interest ends and just then the philosopher's interest begins. Both agree in regarding the portion of space or sensible object as percept, that is to say, as fact of conscious experience, not (as in physical investigation or common life) as fact or thing out of relation to mind. But while the psychologist has in view the percept only as it is *perceived* and explains how the perceiving comes to pass (in me or in you), the philosopher asks what the perceiving imports (for you and me equally)—in particular whether it means or need mean, as it is commonly taken to mean, a thing independent of the perception of either of us. What is the space or object that we perceive? What more is there in it as perceived, than as fancied? If said to be real or objectively valid (as a subjective fancy is not), what makes it so? These and the like questions, which it is not for the psychologist to answer (though it were allowed that he can best put them in train for answer), touch the very heart of what we mean by Knowledge. We may view knowledge as mere subjective function, but it has its full meaning only as it is taken to represent what we may call objective fact, or is such as is

named (in different circumstances) real, valid, true. As mere subjective function, which it is to the psychologist, it is best spoken of by an unambiguous name, and for this there seems none better than Intellection. We may then say that psychology is occupied with the natural function of *Intellection*, seeking to discover its laws and distinguishing its various modes (perception, representative imagination, conception, &c.) according to the various circumstances in which the laws are found at work. Philosophy, on the other hand, is theory of *Knowledge* (as that which is known).

But, if we thus take philosophy as Theory of Knowledge, beyond psychology, it needs to be defined on other sides also: in relation to Logic, accepted as this has been for philosophical doctrine by none more expressly than by Mill and others among the later representatives of the psychological school; and, again, in relation to Metaphysic, the most widely accepted synonym for anything that can be called Philosophy. What we may leave aside, on the present occasion, is the question what other definite lines of philosophical thought are opened up for the psychologist by the other phases of mental life which he distinguishes, from Intellection, as Feeling and Will. It, of course, follows that there are such other lines, when it is seen how the psychology of Intellection passes into philosophical Theory of Knowledge; but the present object is not to lay out the whole philosophical field—only to indicate a point of view.

There is special need of distinction between Logic and Theory of Knowledge; for some (as Hegel) would use the very name Logic for philosophy when conceived as Theory of Knowledge, and others (as Mill), while retaining the traditional conception of Logic, though widening it in a certain admissible way, are found importing into the exposition (as in Mill's chapter iii, "Of Things denoted by Names") a series of considerations which are plainly extra-logical and can only be called epistemological. And, from any point of view, is not Logic a philosophical theory of knowledge? What is valid knowledge? When is knowledge valid so as to command universal assent? What is known truly and what not truly? These questions, which we have used to express the problem of philosophy as opposed to psychology, seem to apply equally to the problem of Logic. Logic is undoubtedly concerned with validity of knowledge. But knowledge to the logician is what is more particularly called Thought; some saying this expressly, others meaning Thought generally when they adopt the more special name of Reasoning, and others implying the same thing when

they speak of logic as having to do with validity of Inference (formal and material) or the conditions of general Proof. Now if we substitute the word Thought, which properly means *general* intellection or intellection *by way of concepts*, for the word Knowledge in the questions just repeated, to make them more accurately express the subject-matter of Logic, we get at once a clue to its distinctive feature as compared with Theory of Knowledge.

Logic, while equally with Theory of Knowledge to be distinguished from psychology as occupied with the philosophical question of validity, is to be distinguished from Theory of Knowledge in having to do with the validity of Thought only as it is general. This view of Logic, as having for its subject the import of the *generality* of general knowledge, agrees either with the limited conception of the doctrine as Pure or Formal Logic or with its range as widened to include Applied or Material Logic. Even when applied to this or that particular kind of matter, Logic goes no farther than to determine the conditions of valid *general* statement (as deductively or inductively obtained) in the particular kind of matter. It does not probe the deeper questions remaining for Theory of Knowledge in regard to any matter of thought. It belongs, for example, to Material Logic to explain the form, mainly deductive, that geometrical reasoning assumes and to determine the conditions of the valid proof of general statements in geometry; but what space may in the last analysis be, whether it is a subjective form of our sense-perception or has any kind of extra-mental reality—these are questions which do not concern the logician except in so far as the answer given to them in ultimate philosophical analysis can be shown to affect the question of the form of general statements in geometrical science. This it very well may or indeed inevitably must do: the present contention by no means is that Logic is not related to Theory of Knowledge. Not only, in the view here suggested, may Logic be regarded and treated as a special department of the general philosophical theory, but, even when constituted into a separate doctrine (sometimes called a special science, though it is no science as mathematics and the rest are), it may constantly have to reckon with epistemological considerations—as the practice of all logicians shows who (like Mill) do not confine themselves to the mere form of thought. All the same, it is not to be confounded with Theory of Knowledge. It deals so exclusively with the one aspect (generality) of such knowledge as it deals with at all that, unless it be denied that this should or

can be investigated apart, the line of demarcation is clear; and as it has not been doubted, from the time of Aristotle, that the aspect is one that can be treated apart, so neither will anybody doubt that it should be so treated who is interested in making knowledge scientific and is alive to the fact that it is of the essence of Science to be *general.*

If philosophy as Theory of Knowledge is thus perfectly consistent with or even includes the traditional conception of logic as a department of philosophical doctrine, we may next see that it consists as well with the conception of philosophy as Metaphysic, though taken in no sense short of that which is otherwise expressed as Ontology or Theory of Being. This sense of the word Metaphysic, historically best justified, is also that which is suggested by analogy with the meaning of Physic. Physic (in its widest application) is concerned about the being of things as they appear—about things only as they appear but yet as they appear to be. Metaphysic, as going beyond Physic, has then to do with the being of things as they are or with their being as the ground of their appearing. But how can such a notion of philosophy as ontological doctrine be entertained at this time of day? It is not only English psychologists, content with their 'mental phenomena,' that have abjured ontological consideration. When Kant substituted criticism of pure reason for dogmatic assertions about a sphere of supersensible existence, did he not establish for evermore that not Being but Knowledge was the proper subject of philosophy? The critical inquiry which he thus put foremost did not, however, preclude Kant from following it up with a 'Metaphysic' (of Nature as well as of Morals) as the proper fulfilment of philosophy; and nothing hinders the philosophic thinker who begins by defining his task (in relation to psychology) as Theory of Knowledge, from considering it as Theory of Being (Ontology) also. The one, indeed, is inevitably the other. The thing that is known, is known to be. The thing that is, is not otherwise than it is known. What it is important to understand—what has come in the progress of modern philosophy to be clearly understood—is, that no dogmatic assertion of Being is philosophically admissible. Before it can be determined what in any ultimate sense *is,* what the modes of Being are, it must first be determined what the modes of Knowing are, what in the ultimate sense *is known.* This is the idea common to the Critical and to the Psychological school of philosophy. But that is no philosophy which, after considering, by one method or another, what it is to know anything and what is or can be

known, starts back from declaring what then must be understood really to be. Philosophy has not only to give the ultimate analysis of things in abstract terms (of subjective import), but must render account of the concrete realities of everyday experience, which in the truest sense *are* for us all because it is to them (animate or inanimate) that all human interest attaches—because it is they only that are conceived as having an intrinsic or extrinsic worth. The philosophy that attempts this is metaphysical in facing a problem that can be expressed in no terms of physical science. It is ontological in seeking to appreciate the ultimate meaning of whatever can be said to be.

It seems, then, that there is nothing within the possible range of philosophy that need remain sealed for the thinker who starts from the psychological base more than for any other. In point of fact, the 'English' thinkers, when in the properly philosophic vein, have no more than others been slow to declare how they conceive of things as, in the last resort, being. They are only chargeable with having allowed themselves to be led, by their method of approaching philosophical questions, into an unsystematic and disjointed treatment of them. The advantage to be obtained by a clear distinction of Philosophy from Psychology would tell in favour of both, but especially of Philosophy which thus far has had its development most hampered in a conjunction which has not seldom been a confusion. There is nothing to hinder the thinker who works up to philosophy by way of psychology from grappling with the general problem of Knowledge, in as thorough a spirit of system as has marked any of those, from Kant onwards, who have thought it the chief merit of their philosophy that it has been wrought out on a plane immeasurably higher or deeper than the level at which psychologists creep along. There is nothing to hinder, and his very psychology should rather urge him on to the work of systematic interpretation, for which it supplies the means as well as the motive. At least it is plain that no psychological thinker need philosophise less systematically than Kant, whose whole scheme of critical inquiry has its stages psychologically determined.

But, after all, the question is not whether psychologists can become philosophers—as, of course, they can if they will, or even whether psychologists are inevitably determined, as other scientific inquirers are not, to pass from conclusions of science to the probing of human knowledge to its foundations. The real question is whether the philosopher in this (or other) part of his task is specially helped

by foregone psychological consideration; and this has not yet been directly met. The previous remarks, however, would seem to warrant an affirmative answer. If it can be shown (as here it has been suggested) that there is no problem of philosophy which the psychologist does not have specially forced on his attention at one or other stage of his science, while his science gives him the means of considering it with a definiteness of insight and in a methodical spirit which interest in the deeper meaning and issues of things does nothing of itself to guarantee, then it cannot be otherwise than helpful to come to the work of philosophy from the side of psychology. Though philosophical questions are not to be solved under the same conditions of strict verification as are possible in phenomenal science, philosophers as well as scientific men desire to gain universal assent for the solutions they propound. Philosophy, however differing from science in its subject-matter, yet aims at the form of science. It has been advanced most permanently, in all ages, by those thinkers who were familiar with the best information their time afforded in the way of special science. If, then, it appears that there is one science which, while it is related to the other sciences in method, has so far common subject with philosophy that it is with Mind they are both (in whatever different way) concerned, the *methodological* advantage of working into philosophy through the science of psychology is hardly to be denied—even though the practical proof may yet remain to be given by psychologists that they can be as thorough and comprehensive as they have hitherto been sober and cautious in their philosophic thinking.

Meanwhile it may be observed how psychological science, working within its own limits, has obtained results whose philosophical import is in surprising agreement with conclusions which it is thought the greatest triumph of a very different method to have been able to establish. Any regret, indeed, that may be felt at the isolation in which English thinkers have held themselves from the Kantian movement in philosophy—being content to work on from their psychological base as if it had never been questioned—is tempered when it is seen what independent progress they have been able to make upon their own line towards a common goal. That is no argument for maintaining the isolation, but may be held to prove that the method of psychological approach is not philosophically valueless, and gives ground for the belief that it has only to be more systematically followed out for the achievement of as great results as have ever been claimed for another way, while in

this way the results are more likely to secure general acceptance. Let us, in concluding these remarks for the present, note but two points in the philosophical theory of knowledge which, since the time of Kant, may be regarded as placed beyond reasonable question: (1) that we know Space, abstractly, as a 'form' inclusive of sensation and, actually, as one great *continuum* (percept, not concept) within which all sensible objects are ordered; (2) that anything to be definitely called Object, as a sensible reality for all men alike, is a complex product of thought-activity working under common conditions in all. Now nothing is more remarkable than the different accounts which the earlier and the later English psychologists give of the perception of space and of 'external objects'. Compare with Locke's crude notion of space, as a direct and simple datum of touch or sight, the present psychological theory that we acquire perceptive consciousness of it by active synthesis, through muscular organs, of elements of (passive) sensation; or, again, compare with even Hume's insight (so greatly marked beyond anything in Locke or Berkeley) into the processes of intellectual elaboration involved in objective perception, the grasp that psychologists now have of the representative factors that more than any presentative elements explain how the percept appears as it does. I do not say, here more than before, that the psychological are the philosophical questions, but I say that there is no aspect of the philosophical questions which may not be better understood and more definitely treated because of the psychological insight that has been gained. There is nothing in Kant's philosophical analysis of either fact of cognition—nothing, that is to say, which from the point of view he places himself at may be unquestionably maintained —for which a positive psychological warrant cannot now be assigned; while it is psychology that gives the clearest demonstration of the limits that should be placed upon his assertions (especially as to the universality of the space-form as regards 'external' sense). If that be so, Psychology is amply avenged upon him for his despite.

EDITOR.

II.—PROPOSITIONS WITH A VIEW TO PROOF.

That the view taken of the Proposition depends largely on the purpose for which it is required, is not perhaps likely now to be seriously disputed. As Mr. Venn notices,[1] "Logicians have been too much in the habit of considering that there could be only one account given of the import of propositions," whereas "when we are discussing methods rather than theories, this is not necessarily so": it is not that one view is right and all the others wrong, but rather that correct views may be as numerous as the different purposes that can be set before us.

For the purpose of dealing with the dangers of Proof,—including thereunder all dangers to which a thesis, or asserted judgment, is liable,—the most important fact about propositions seems to be the power which they give us (when their truth is believed) of passing from the known to the unknown. There are two distinct ways in which they do this, one of which may be called 'implication,'[2] and the other 'material indication'; the former being the case where by merely analysing the *meaning* of a name or proposition we either arrive at or guarantee certain of its less obvious consequences; while 'indication' (in general) includes this case and also the commoner one where we obtain the same power, not by mere analysis of the meaning, but by viewing one fact as material evidence for another,—evidence asserted as strong enough to stand against all hostile criticism. The proposition 'man is fallible' might be an instance of either of these modes of indication, according as the notion 'fallibility' did or did not enter into the special meaning postulated for the name 'man'. If we pass to new knowledge[3] by analysing the old, we do not

[1] *Symbolic Logic*, chap. i.

[2] Cf. Mr. H. MacColl, in Mind, No. XVII., p. 45. The chief point where I differ from the view there set out seems to be in holding that 'implication,' both in its ordinary sense and as interpreted by Mr. MacColl, requires a too nominalistic view of the import of the proposition. Again, while 'indicates' is forced enough, when applied to the singular (or concrete) proposition, 'implies' seems a word quite impossible to stretch so far. Also, I think the proposition 'if he is a man, he is mortal,' different from 'man is mortal' (*ibid.*, p. 52), since the former need not (formally) apply to more men than one. But in other respects I follow Mr. MacColl very closely, and am much indebted to him.

[3] The question whether, by analysis merely, we can 'increase our knowledge' is as ambiguous as the question whether by digestion we can

reach a new theory, but the application of an old one: while the attempt to prove by way of implication is, of course, either to argue in a circle or to appeal *ad hominem:* material indication is the sole means either of really passing from unknown to 'theorised,' or from theorised to known, —so far as knowledge is capable of being guaranteed.

If we elect to consider propositions solely as regards their function of end or means in the practical process of Proof, three chief consequences follow:—

First, we are free from that main difficulty surrounding the question what exactly is a *Judgment;* the difficulty namely that all judgments must be supposed rangeable on a scale of completeness or finish, the ends of which scale are not satisfactorily marked out.

Secondly, the distinction between Real and Unreal propositions rises into considerable importance; the latter name being here used to express all kinds of apparent proposition (*i.e.*, of sentences, containing nominative case and verb) which are incapable of Proof or Disproof.

And thirdly, we are under strong temptations to adopt that view of the import of propositions which consists in holding, not that 'something' is spoken of, and a predication made about it, but that two 'things' (in a sense to be presently explained) are spoken of, and a relation of some kind asserted or denied to exist between them.

Taking these three points in order, we may dismiss the first and second with merely a few words of explanation. It needs no lengthy process to show that any judgment, to be capable of being made a thesis for Proof, must be at least so far finished as to be expressible in the form of a proposition; and on the other hand that although inquiry into its justification can in one sense never be completely ended, yet a stage may come, in the history of any reasoned belief, when instead of confessing reluctantly that only 'practical certainty' is achieved, we more fairly express the facts by boldly claiming that none but 'theoretical doubts' can any longer exist. At any rate, rightly or wrongly, assertions are sometimes allowed to pass for true; and a judgment is a thesis, only when capable of expression in intelligible language and while the need for Proof is felt.

Next, the name 'unreal' as here applied to propositions is somewhat wider than what is usually meant by 'verbal'.

'increase' the food we swallow. We get a new, and firmer, grasp of old material. Though we may of course add to our power of applying knowledge, by analysing accepted truths, this merely points to the thoughtlessness with which we habitually bolt our axioms whole.

Usually the distinction between real and verbal is taken to correspond precisely to that between accidental and essential propositions, verbal propositions being restricted to mean such only as are tautologous. Thus 'a triangle is a three-sided figure' is commonly given as a typical example of the verbal proposition. But for our purpose we need some name to express indiscriminately all kinds of apparent assertion which are unsusceptible of Proof, and in order to avoid ambiguities I propose to call these 'unreal' rather than verbal. It is not necessary here to face the question as to the means of distinguishing in practice unreal propositions from real. Such inquiry belongs by right to the methods for detecting fallacies. But it may be well briefly to indicate the heads under which unreal propositions will be conveniently divided.

In the first place comes the familiar case, already noticed, of tautologous, essential, or analytical propositions. On these, nothing need here be said,—except that, in our view, a *definition* may be asserted as a 'real' proposition whose subject is 'the meaning (whether best, usual, or special) of the word —'.

In the second place we must certainly describe as unreal those propositions which in any manner involve a contradiction in the assertion made. Here the unreality flows from precisely the same source as in essential propositions. The question of their truth is pre-judged already in the definition of the terms employed, and hence they contain no subject-matter for Proof.

And thirdly we must include the case where, from one cause or another, any term used in a proposition fails to convey intelligible meaning. There is, so far as I am aware, no special name in use for this kind of unreal assertions as a class, although certain forms of them have (very properly) earned the name of mysteries. These too, from the nature of the case, may safely sing in presence of the robber Doubt. So far as they are consistently incomprehensible, so far the question of their truth or falsity can clearly not be raised, except in words. Their acceptance indeed, as a formula, may show a willing and tractable spirit, and they may to that extent have a value: but such acceptance differs of course from belief in being admittedly a voluntary act, and not a mere immeritorious and reluctant yielding to the brute weight of evidence. It is unnecessary here to occupy space with examples of these three familiar kinds of pseudo-proposition.

Now, as to the Import. It is on all hands admitted

that every proposition, so soon as understood, may be divided into two parts,—the Subject, or name of the 'thing' primarily spoken of, and the remainder of the sentence, or the words expressing the whole assertion made about such Subject. If we denote the Subject by the letter S, we may denote the remainder of the proposition by the letter J,—the judgment made about the S.

In so general a science as logic,—or since the province of logic is not yet clearly marked out, let us say in so general a science as that of Evidence or Proof—we find ourselves constantly brought up against the difficulty of obtaining words wide enough to include all that we mean. Thus though assertion always asserts 'something' of 'something' else,—though 'everything' may have assertions made about it,—yet it seems hardly safe to say that assertion is always about 'things'; unsafe at least without explaining that 'thing' is here used in the widest possible sense. Not merely every *thing* (as commonly understood,—namely every material object) may be the S of a proposition, but literally *everything* or *anything*, that can be named at all; everything that can be spoken of, whether objective or subjective, real or imaginary, whole or part, great or small. The universe itself is a 'thing' in this sense, and so is every portion of it. Time and space are things in this sense, and so is the year 1882, or the point of the pen with which I write: so is the heat of to-morrow's sun, or the justice shown in my friend's remarks of yesterday: so is the word 'Logic,' or the meaning of that word, or the relation between its meaning and something else, or the character of that relation, or the fact that the character of that relation is beyond my power to state. We need some name thus to express in general, 'anything that may be spoken about,' and in spite of the possibly misleading associations of the word here chosen (which at first sight may seem to demand tangibility almost, or at least visibility or weight) there is really no other name that will mislead so little. If we may say 'everything' in one word, shall we not say 'every thing,' in two? At any rate such employment of the word will here be postulated in default of any other name to serve the purpose required.

Mr. Venn, in his *Symbolic Logic* (chap. i.), discusses three distinguishable views of the import of propositions—the *predication* view, the *class-inclusion and exclusion* view, and the *compartmental* view; finally adopting the latter as best suited to the purposes there aimed at, and especially to the solution of intricate artificial problems. But there is a fourth theory which, though agreeing with the compartmental view in one

of the main points in which it differs from the older doctrine —namely, in considering that every proposition has (at least) *two* subjects, each term being the name of a 'thing spoken about'—yet seems to me to differ from it fully as much as the predication-view and the class-view differ from each other. That theory, suggested in Mill's system,[1] stated very broadly by Mr. H. Spencer,[2] and more recently worked out into considerable detail by Mr. Carveth Read,[3] may be described as the *relation*-view of propositions, and may be briefly explained as considering that every proposition really asserts the manner in which *two* nameable things are related to each other—*e.g.*, as resembling or differing, and to what extent; as successive or simultaneous in time, or conjoined in space, and whether invariably so, or otherwise.

It is usual in logic to divide what was above symbolised by J into (1) Copula, and (2) Predicate, and if it were possible to keep these names while avoiding ambiguity, I would gladly do so. But though 'Copula' might fairly be used to express 'relation asserted,' it seems impossible to divest the name 'Predicate' of its etymological associations so as to view it as really the name of another 'thing spoken about'. We must therefore here adopt another symbol, and perhaps the letter $\mathfrak{S}$ is as little ambiguous as any. Under the relation-view, then, the form of proposition would be, not S copula P, but S copula $\mathfrak{S}$.

The difference, other than formal, between this and the compartmental view appears to me to consist chiefly in the greater variety of assertion allowed for here. The compartmental view deals (directly) only with the relation of class inclusion and exclusion: the relation-view considers this as one possible relation amongst others. A further difference—a formal one, however—may perhaps be found in the fact that under the relation-view the unit of assertion is a single pair of related terms, while under the compartmental view there is no limit to the number of terms that may be (symbolically) combined into one proposition. The compartmental logic provides "a place and a notation for the various combinations which arise from considering three, four or more classes," and it is easy to see therefore that so far as the purpose for which logic is required is that of unravelling complicated class-relations deductively, nothing

[1] Namely in his use of the relations of co-existence, sequence, causation, and resemblance.

[2] *Principles of Psychology*, Part VI., chap. viii.

[3] *Essay on the Theory of Logic.*

could be better adapted to such purpose than the view thus named and utilised in the work above referred to. But as Mr. Venn, in more than one place,[1] is careful to notice, these developments of logic are more interesting on the theoretical than on the practical side. As he points out "it is very seldom that intricate logical calculations are practically forced upon us; it is rather we who look about for complicated examples in order to illustrate our rules and methods". What logic as a practical science is chiefly occupied with is the determination, when any Thesis and any Reason are before us, of the further assertion (if any) required to stop all gaps in conclusive reasoning. And for this purpose, the compartmental view will, I think, only help us so far as expressing descriptively the single, though important, relation called by Mr. Carveth Read "essential co-existence," and more familiarly known as class-inclusion. Of the three theories discussed by Mr. Venn, there can be little doubt that the one which, as he says, has been determined by the ordinary needs of mankind, is on the whole the best adapted for practical purposes.

It was said above, that, with the view of forwarding the practical side of the science, we are under strong temptations to adopt the relation-view of propositions. But it must not be supposed that we need therefore discard the traditional doctrine as erroneous. More fully, what was meant is that if we wish to classify propositions for purposes of Proof, simplification as far as possible becomes in the highest degree important. Instead, for example, of having two sorts of propositions, categorical and hypothetical, in only one of which the names S and P are employed, while in the other we have to speak of antecedent and consequent; and instead of accordingly having two sorts of syllogisms, with separate sets of rules, S and $\mathfrak{S}$ will apply to all propositions, whatever their grammatical form, and the syllogistic process becomes a single one. Again, under the predication-view, the Predicate in propositions asserting causation can hardly help becoming exceedingly unwieldy, and the central point of the assertion is often rendered obscure. Take such propositions as 'the sudden thaw was the cause of the flood,' or 'where the carcase is, there will the eagles be gathered together,' and ask what the predication view makes of them. In all propositions where causal sequence is referred to, the obvious primary meaning is that two 'things' (usually events, but sometimes objects or qualities) are somehow connected, and

[1] *E.g.*, Introd., p. xviii: also chap. v., p. 119.

not that one thing (the S) deserves to have a certain complicated assertion made about it.

It must be added, however—what remains in fact as the best practical excuse for the predication-view—that often one of the 'things spoken of' is more *directly* spoken of than the other. One of them forms the *datum*, or starting point for the assertion, while the other forms its goal. Thus S may denote an observed or known event, and $\mathfrak{S}$ its supposed cause or effect; as in 'this death points to foul play,' or 'the war will disturb all prices': or S may be the name of something quite familiar, and $\mathfrak{S}$ one of its less obvious causes, consequences, or concomitants, or less familiar names; as in 'tubercle is due to organic germs,' or 'strikes are ruinous to the country,' or 'gold has specific gravity 19·34,' or 'whales are mammals'. Although in short every relation is, strictly speaking, two-sided, not every assertion intends to concern itself equally about both its possible aspects. If S 'resembles' $\mathfrak{S}$, for example, it certainly cannot be denied that the latter also resembles the former, and yet our whole concern in making the assertion may be to bring the former just within the range of what we know (or suppose to be true) of the latter; our knowledge of $\mathfrak{S}$ as regards the relation to a third term, Z, being in some way better established than our knowledge of S. Again, if S 'indicates' $\mathfrak{S}$, the latter 'is indicated by' the former; but the main purpose of indication is, of course, to point from sign to thing signified. The former is the *datum*, the latter the goal.

The relations that may exist between S and $\mathfrak{S}$, as thus understood, are of course extremely numerous. That is to say, we can, if for any purpose it be desirable, distinguish an endless number of them. S may, for instance, be the father of $\mathfrak{S}$, or his mother, child, wife, &c., or larger than $\mathfrak{S}$, or less ambitious, or may live next door to $\mathfrak{S}$, or may be related to him, or her, or it, in a million different ways. For our purposes, however, it will fortunately be sufficient to make only the broadest subdivision.

Main Kinds of Thesis.

The most important distinction among kinds of real assertion is undoubtedly that between Positive Assertion—otherwise called 'affirmation,' and bare Denial. Certain propositions, instead of committing the assertor to any definite statement of the relation between S and $\mathfrak{S}$, are content to say merely that some definite assertion, taken as

already made about them, is untrue. These will be called denials: all others will be called positive assertions, or 'affirmations'.

It is a matter of some difficulty to mention any special grammatical form as fairly representative of the denial, since even sentences containing the negative particle 'not' in close connexion with the verb, or the quantification 'no,' before a noun, or a 'negative name' as $\mathfrak{S}$, are very frequently used to express a positive assertion as here defined. Thus we may say 'that is not bad,' or, 'no pen can attempt to describe the scene,' or, 'he is unskilful, worthless, disagreeable, incompetent,' &c., without at all intending to confine ourselves to bare denial of something either actually or only presumably said before. The grammatical form of the proposition, though often useful as a hint towards the meaning in this respect is at best an uncertain guide; nor can even the whole context be taken as in every case complete evidence of the real intention.

The two distinct intentions do however exist, and are to some extent inferrible from the words employed. Where the intention is doubtful there is nothing to fall back upon except an express declaration by the speaker as to the sense in which the proposition is put forward. At present however we are not concerned with the means of arriving at the intention, but only with classifying those distinguishable meanings which have importance for the doctrine of Proof. Of these the most important is the distinction between positive assertion and bare denial. And we may now proceed at once to examine more in detail the manner in which this distinction runs across the others.

Next in importance is the opposition between Law and Fact asserted; or as it may be otherwise called, between abstract and concrete propositions. The most general of all relations, asserted or denied, is that which for want of a better name, may in the meantime be called 'Indication' or 'Essentiality'. The copula 'indicates,' as here understood, includes the copula 'is' (as in 'S is P'), stretching however beyond the usual interpretation of the latter. By calling this the most general relation it is meant that, with the one doubtful exception of the purely quantitative relations (the laws of which are amply developed in mathematics and require notice only in a more comprehensive scheme than can here be attempted), every proposition may be viewed as saying that one thing indicates, or does not indicate, a certain other.

The apparent rashness of this statement will serve at least

to show where the difficulty lies. Some word is wanted for the purpose of generalising, in one expression, several kinds of assertion which are commonly described by different names; no word appears better suited for the purpose than 'indicates,' and yet even this would certainly not be sufficient without some explanation. By means of a symbol indeed, it would be possible to avoid ambiguity, but since the symbol must have a name, we could not altogether escape the use of language, and could only strive, while using it, to avoid any misleading associations.

The chief difficulty really consists in stretching the name 'indication' to cover both abstract and concrete propositions. It is easy enough to see how every *Law* asserted may be viewed as an indication, since the primary purpose of every law is, of course, to be interpreted or applied: hence the S of every abstract proposition is expressed either directly as a 'general name' (simple or complex), or else—and especially where it is a proposition—is generalised by means of an 'if' or 'where' or 'when,' &c. But when we come to speak of concrete propositions the word 'indicates' draws us into clumsiness of expression at once. This case of death, no doubt, may indicate (or point to) poison, or my pulse at the present moment may indicate (or show) the absence of fever, or yesterday's panic in the city may indicate (or foreshadow) a future crop of bankruptcies; but it is undoubtedly clumsy to say that our enemy 'indicates the qualities of' a fool: we habitually condense these four words into the one word 'is'.

Nevertheless, with this apology, I propose to use the name 'indicates' in default of a better to fit all cases. Much of the difficulty may be removed by remembering that it is only in abstract propositions that S is really a sign, in the ordinary sense of the term: it is only there, at least, that it is intended to be *used* as a sign, or mark, or label, bearing a recognised meaning. The essential characteristic of concrete propositions is that their S cannot be said, *in general*, to indicate the $\mathbb{S}$, but only by virtue of all the special circumstances bound up along with it. It may indeed be on general grounds only that we in fact believe this or that concrete proposition—as, that the panic will produce a crop of failures: but this does not appear in the statement. In the concrete proposition we distinctly assert the possession of something over and above mere general grounds, namely a full review of all the special circumstances. In spite of any hidden facts, we assert our judgment as deserving of belief.

The relations, then, which are thus to be included under the name of 'indication' are those of *Dependence*[1] (whether causal or logical) and of *Classification*. By an assertion of causal Dependence is meant an assertion that two 'things' —usually events but sometimes objects or qualities—are causally connected so that one of them is to some extent an indication of the other, whether a sign in the strict sense, or merely a symptom. Some things in nature are found or supposed to be marks or signs of others, as a falling barometer indicates a coming storm, or as breathing indicates that life is not extinct, or as every existing human being indicates the prior existence of a pair of human parents. By an assertion of logical Dependence is meant an assertion that the truth of one proposition follows from that of another, or that the meaning of one name is included in that of another. Most names and propositions are intended to bear a meaning—that is, to mark or signify notions or facts—and some propositions are intentionally put forward as guaranteeing the truth of others. Thus the name 'Intolerance' may be intended to include the notion 'active hostility'; or the assertion 'he is coming' the fact 'he is not here'; or again the assertion 'he is a man' may be employed to guarantee the truth of the assertion 'he is fallible'. By an assertion of Classification is meant the extremely frequent case where a 'thing' is said to deserve a certain name, or to bear 'essential resemblance' to another thing, or to belong to a certain class, or to possess a certain quality, or to have another thing 'co-existing' with it; as in 'gold is an elementary substance' or 'belongs to the class elements,' or 'the state essentially resembles a family,' or 'every rose has its thorn'.

The word 'indicates' being used, then, in this extended meaning, the assertion that one 'thing' (S) indicates, or does not indicate, another ($\mathfrak{S}$), is sometimes made generally (*i.e.*, 'universally' or wherever such S may be found or occur)—as in 'all men are fallible,' or 'death when accompanied by certain symptoms always points to arsenic,' and sometimes of a particular case alone, as in, 'this man has made a mistake,' or 'this death is due to arsenic'. The former kind of proposition will be here called *abstract*, the latter *concrete*.

The abstract proposition may be expressed indifferently in any one of a number of various grammatical forms, perhaps the commonest of which are those familiar types (denoted

[1] Cf. Wundt, *Logik*, pp. 179-186, 277, 281, &c.

under the traditional scheme by the letters *A* and *E*) whose S is the name of the members of a class, 'all' or 'none' of whom 'are' P. Thus 'all men are fallible,' or 'no men are secure against fallacy' are simple, straightforward examples of the assertive abstract proposition. In both cases the attribute 'humanity,' wherever found, is said to indicate the attribute 'liability to error'. Another common form which the abstract proposition takes is where the S consists of what is sometimes loosely called an abstract name, as 'honesty' or 'theft'. Thus we might assert that 'honesty is the best policy,' or that 'theft cannot prosper long'; meaning, in the two cases respectively, something rather more clumsily expressible as that honest actions, in general, 'indicate' success as likely to follow, and that dishonest actions, in general, 'indicate' that (in spite, it may be, of temporary success) ultimate failure is probable. Of course these and similar sentences may contain other meanings also—may even be used ironically—but in so far as they are used to express the meaning here spoken of, to that extent they are what we here call assertive (or affirmative) abstract propositions. Again the adverbs 'always' and 'never' are very largely used to express the copula of assertive abstract indication, as in 'bread always falls upon the buttered side,' or 'a story never loses by re-telling'. And again another still commoner grammatical form in use is the conditional or hypothetical sentence, beginning with 'if' or 'when' or 'where' or 'while,' etc., as in 'if it rains in Ceylon it pours,' or 'when poverty comes in at the door, love flies out of the window,' or 'where there is smoke there is fire,' or 'while there is life there is hope': in each of these cases the purpose of the proposition may be to assert of one 'thing' that it universally indicates another, whether in the past, present or future relatively to itself. We need not follow these grammatical variations into further detail: enough has been said to illustrate them for the purpose required.

The concrete proposition on the other hand contents itself with a less apparently sweeping assertion. It says, not that S, wherever found, indicates $\mathfrak{S}$, but that in this particular instance it does so. Looking at all the circumstances, the present dearness of money indicates a coming panic, the circumstances of this man's death point to some kind of poison, the latest political movement indicates dissension in the cabinet, or deserves the name of revolutionary or reactive, or whatever else it may be. The difference is perhaps best expressible by saying that while in the abstract assertion S is spoken of (but by no means really *conceived*)

apart from any surrounding circumstances which may serve to individualise it, in the concrete assertion the reverse is the case: we here say that *taking all special circumstances into account* this S indicates $\mathfrak{S}$.

Corresponding to abstract assertions there are abstract Denials; and of these, two kinds may be distinguished. Sometimes we deny a law by asserting that there are exceptions to it, sometimes (*e.g.*, frequently in classifying or name-giving propositions) by asserting that it totally fails; or in other words, that 'some difference exists between S and $\mathfrak{S}$'. The former kind of denial may be called *exceptive;* the latter an *assertion of difference.*

As to the exceptive denials, perhaps the most frequent grammatical form which these take is that known under the traditional arrangement as the particular proposition[1]: *e.g.*, 'some negroes are fairly intelligent' or 'some Mexicans are not habitual liars'. Again the adverb 'sometimes' or 'sometimes not' is frequently used in exceptive denials; and again the expressions '$\mathfrak{S}$ is quite compatible with S' or 'S is by no means necessarily $\mathfrak{S}$'; and again the expression 'all . . . are not,' as in 'all that glitters is not gold'; and various other forms, such as, for example 'there are lawyers *and* lawyers'. Here also no form of words is by itself perfectly unambiguous: we often need something else to show whether the proposition is really intended as assertive or as a bare denial. But on the whole and roughly, the particular proposition may be taken as most nearly typical of this class. No fruitful distribution of any proposition into its component parts, it must be remembered, can ever be made until the real intention of the speaker is clear.

As to 'assertions of difference' here, as the name chosen may help to show, there is some difficulty in placing them quite clearly in the class of mere denials. The justification for doing so lies however in the fact that without some supposed belief that, for the purpose in hand, no difference

[1] Cf. *Symbolic Logic*, chap. vii., p. 161: "It can extinguish no class, and establish no class, and has therefore no categorical information to give the world." The particular proposition, as actually employed, no doubt serves several other purposes also, notably that of registering our first vague grounds of *Inference* as contrasted with anything deserving the name of grounds of Proof. Finding two 'things' frequently or even occasionally conjoined, we often begin to get upon the track of some law, and eventually we may rise thereby to the power of making and perhaps proving, some abstract assertion regarding them. But regarded as positive assertion, this is too vague to be called a 'thesis'.

exists (*i.e.*, that S 'indicates' $\mathfrak{S}$) the assertion of difference is too trivial to have any practical value, since points of difference may always be found between two 'things' however nearly alike. Hence the essential purpose of these assertions is to *contradict* something already supposed to be believed. The sole practical use of the assertion of difference is either to break down a supposed analogy or to deny the applicability of a name, *i.e.*, the right of a thing to belong to a certain class; and this whether the proposition be abstract or concrete. Thus we might say 'national government is a different thing from family government' (abstract), or 'whales are not fishes' (abstract), or 'the Kilmainham arrangement was not a compact' (concrete), or 'the case of Mr. A. is different from that of Mr. B.' (concrete). These propositions merely say that S *differs from* $\mathfrak{S}$. For further examples of this form of denial we may take such expressions as 'seeing is a different thing from believing,' or 'liberty is one thing and licence quite another,' or even perhaps 'force is no remedy'—though this last phrase has no doubt been more often used to express a vague law that 'force indicates probable continuance of the evil' than merely to deny an assertion to the contrary, or to correct the use of a name. As this last example may serve to show, there is sometimes a difficulty in deciding whether a given sentence is really an assertion that S indicates the absence of something (as ice, for instance, indicates the absence of a certain degree of heat), or a mere assertion of difference between S and $\mathfrak{S}$. But this is a difficulty which cannot be remedied by simply refusing to notice it. The possibility of misunderstanding the real intention of a given set of words, is one that can hardly too often be brought to mind.

Corresponding to concrete assertions there are concrete denials; and of these again two kinds. We have just spoken of the concrete assertion of difference, and, after what has been said of assertions of difference in general, the nature of the first kind of concrete denials will be sufficiently clear. Nor is there much difficulty as to the other kind. It follows from the nature of concrete assertion that these cannot be at all described as exceptive—since there is no law to which they directly take exception. Perhaps the best name for them is 'Simple denials'. These also are found in various grammatical forms, but the commonest is, no doubt, where 'not' is added to the verb, as in 'this was not due to drink,' 'the crisis will not be followed by any important change,' 'it is not accompanied by much

danger after all,' etc. Also in this sense a negative name as S may be sometimes used, though perhaps rarely. Thus in saying 'the door is unfastened,' we might conceivably intend merely to deny the opposite assertion, but more probably the intention would be to convey a positive assertion of our own. When the distinction that has here been drawn between concrete and abstract propositions is clearly kept in view, it becomes sufficiently easy to recognise the simple concrete denial.

The abstract proposition is, then, the assertion or denial of any general law in nature, of however narrow sweep or insecure stability: the concrete proposition is the assertion or denial of a single fact. The concrete proposition takes a concrete S—'this man,' 'these instances,' 'my lecture yesterday,' 'your hope of success,' and tells us what these 'indicate' forwards in time, or backwards or contemporaneously. And here must be noticed an objection which may possibly be raised at first sight to this use of the word 'concrete'. A man it may be said is clearly concrete enough, and so perhaps is an instance; but a lecture—is not that dangerously near the abstract, and 'hope,' 'success,' are not these purely abstract terms? The answer is that no word (when used in a proposition—and it is only when so used that we are here concerned with them) is in itself either abstract or concrete, but its context makes it so. Any word may be either, according to the purposes of our assertion. We may speak of man or of men in the abstract, in spite of the solid flesh belonging to each individual; and on the other hand, by hedging in a so-called 'abstract name' with the help of a demonstrative pronoun, or in whatever way the resources of language will allow us to apply such name to some actual concrete case, we destroy for the time its abstract nature, and the proposition as a whole becomes concrete. If I make an assertion regarding the 'truth' of some particular story, I state no law, and deny no law, but confine my remarks to one particular concrete fact. The underlying meaning of 'abstract' is always 'detached from special circumstances' or 'generalised,' and so long ago as Berkeley's time, our limitations in *conceiving* anything in the abstract have been clearly shown. We cannot conceive things in the abstract, but we can make abstract assertions regarding them—can sometimes say, that is, how they will behave, or how they should be explained, or designated, under all circumstances indifferently; and where we speak of *this* man, *your* hope, etc., we include special circumstances which 'man' and 'hope' by themselves would lack.

Whether or not 'hope' in the abstract may tell flattering tales habitually, we say that taking all the present circumstances into account it does so here. The S of a concrete proposition differs from that of the corresponding abstract one in being saddled with all the individual peculiarities of the given case. And on this account the concrete assertion differs from the abstract one in being less easy either to prove or disprove, since surrounding circumstances are nearly always wide enough to contain something that even science fails to reckon.

It is evident also that, so long as the meaning is clear, the grammatical form of the sentence—categorical or hypothetical, simple or complex, *A* or *E*, etc., is not of the slightest importance as regards this distinction. The proposition, for instance, 'murder will out' is for purposes of Proof the same whether expressed in this fashion or in the shape 'all murders are eventually discovered,' or 'no murders remain undiscovered,' or 'murder always comes to light,' or 'murders never remain hidden,' or 'when (or if) murder is committed, detection is sure to follow,' or in whatever way it may suggest itself to rhetorical ingenuity to clothe the same meaning. At the root of all abstract propositions lies the formula 'S (universally) indicates $\mathfrak{S}$'; and this whether $\mathfrak{S}$ be past, present, or future relatively to S, and whether the name of either be positive or negative. In each case S (in general) is said to be a sign or mark of $\mathfrak{S}$, whether in the past, present, or future relatively to itself. Where S is found, $\mathfrak{S}$ (it is asserted) may be looked for.

Abstract propositions play an important part in proof—whether proof of other abstract propositions or of concrete ones. They summarise, in a compact and convenient form, whatever general knowledge of nature we have already obtained, and serve as tests to which to bring any new assertion propounded for proof. The establishment of these is of course the centre of interest for science. It is through the existence of such 'dependences' that all explanation and prediction become possible, and our consistent recognition of them constitutes the main difference between our conception of nature as a network of uniformities, and the earlier notion, so inevitable to savages, of a world governed by caprice or luck.

Concrete propositions on the other hand, although constituting in one sense the foundation for science, find their main interest, as subject-matter for proof, in a less exalted region. Although in common life also the truth of general laws (more or less vague perhaps in their statement) may to

no small extent be debated, yet the bulk of the questions arising there for settlement are of a concrete character; and, roughly speaking, the commoner the life the more relatively frequent are the concrete assertions put forward. Whether this or that thing, person, or definite group, did act in such and such a manner, or does possess such and such qualities, whether this or that individual action, event, or 'accident,' was due to such and such causes, or will have such and such results; these are the most frequent questions about which in daily life doubt arises, and which press for settlement and proof. Every one of these is concrete,—an assertion directly regarding individual fact, not general law, —and as such is marked off by a chasm as wide as any that can be made in logic, from the propositions above defined as abstract. Between concrete and abstract knowledge, however, in respect of their attainment and growth, there has been mutual aid and mutual criticism so far back as can be traced at all. No doubt, in one sense, concrete knowledge (or something separated from knowledge only by imperceptible degrees) is earlier in time, just as common life is earlier than science. But in both there are now innumerable shades of development or completeness. It may be safe to say perhaps that from concrete sensations the first predisposition for abstract knowledge arose, and that on crude concrete perceptions, aided by such predisposition, the first crude abstract guesses were formed. But the history of knowledge, from the earliest evidence attainable, is a record of the alternate and mutual production, correction, and illumination, of one kind of judgment by the other. Whatever may be true of the earliest concrete assertions, at the present time every concrete assertion put forward as a thesis carries with it a remote and indirect reference to numerous 'laws' assumed. It professes, by implication, the knowledge not only of a law but of conflicting laws, by means of which the special circumstances can be allowed for and a total balance struck. Thus the concrete proposition, when so far developed as to become a thesis for Proof, is always rich in overtones. The abstract proposition also, certainly, professes an acquaintance with concrete facts, but not quite in the same manner as the concrete proposition professes a knowledge of the laws of nature as bearing on the special circumstances of the case under consideration; for, since the abstract proposition expressly avoids saying anything about special circumstances, the assertion made is almost infinitely simpler. Practically of course the overtones in a concrete assertion are largely overlooked, but it is

their existence which constitutes the chief weakness of unaided common sense. What seems to common sense more indisputable than that this given action is a case of 'firmness' or 'strength of character' or 'courage'? Perhaps a deeper insight would show that among the special circumstances must be included ignorance of conflicting claims, or ignorance of danger.

There still remains to be noticed that very common form of proposition, which, when two concrete things are already *given* as having occurred or as existing, successively or simultaneously, asserts causal connexion between them. When we say for instance, 'your hasty speech was the cause of all the disturbance,' or 'it is this pillar that supports the building,' is the assertion properly abstract, as implying some *law*, or concrete inasmuch as it speaks directly and expressly of individual facts? Such propositions, I hold, may be used for either purpose, or for both together. It is difficult to say for which they are most often applied, or even which is most often their primary meaning. On the whole one would be perhaps inclined to call their concrete meaning primary, and to say that the abstract meaning was rather insinuated or implied than directly intended as an assertion. But in practice it will be found that these assertions are largely used for apparently confirming, by means of facts experienced, causal laws already more than half believed. And since the abstract meaning has a wider importance, and since moreover if an assertion be true in the concrete there must also be some true abstract assertion behind it, it seems best to view these as capable of both a concrete and an abstract meaning, the disproval of either of which would disprove both. For convenience, then, we may speak of them as abstract-concrete propositions, if it be clearly understood that they form no new distinction in kinds of meaning, nor interfere with the division already made (of meanings, not of forms of words) into abstract and concrete.[1]

Succession and Co-existence.

There are not many minor distinctions of meaning in propositions, that call for notice here. It seems necessary, however, to mention briefly the distinction between propositions asserting Succession (whether backwards or forwards in time) and those asserting Co-existence; or, as they are more commonly called, assertions regarding causation or causal sequence, and assertions which merely *name*, or classify,

[1] See Note *, p. 39.

the S, or which state some of its constant concomitants without necessarily attempting to trace them to a parent cause. Such importance as the distinction has, for us, flows from the fact that according to the nature of the assertion in this respect is to some extent its liability to special dangers.

Wherever indication is asserted, whether in abstract or concrete propositions, all importance turns of course on the degree of trustworthiness of the sign[1]: some signs being more certain than others, but even a vague symptom being better than none at all. And according as the assertion points backwards or forwards in time (S a sequent of $\mathfrak{S}$, as in 'valleys indicate prior denudation'; or S an antecedent of $\mathfrak{S}$, as in 'Deficient education indicates future increase of crime') is it to some extent open to special and different dangers: propositions pointing backwards being liable to the danger of overlooking 'plurality' of causes; and propositions pointing forwards, to that of overlooking the liability of one cause to be counteracted by another.

Thus, to take first abstract assertions, it is seldom we can say that any given S invariably indicates the past existence of any given $\mathfrak{S}$—unless indeed the $\mathfrak{S}$ employed be so vaguely defined as to be of very little practical service. Every event (S) we may, no doubt, assert (within the widest empirical limits) indicates the past occurrence of *some other event*, the

[1] We must here use 'sign' in an extended meaning also to correspond to 'indication': so as to say that in *every* proposition, abstract or concrete, S is the 'sign' and $\mathfrak{S}$ the thing signified or 'signification'.

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* (From p. 38.) We thus get six main kinds of Real Proposition:—

Abstract
- Assertion
  - (1) Abstract Assertion (or indication). [S, in general, indicates $\mathfrak{S}$.] *E.g.*, 'children never think of others'.
- Denial
  - (2) Exceptive abstract Denial. [S fails as a general indication of $\mathfrak{S}$.] *E.g.*, 'some children are unselfish'.
  - (3) Abstract assertion of Difference. [S differs from $\mathfrak{S}$.] *E.g.*, 'whales are not fishes'.

Concrete
- Assertion
  - (4) Concrete Assertion (or indication). [This S 'indicates' $\mathfrak{S}$.] *E.g.*, 'this was due to carelessness'.
- Denial
  - (5) Simple Concrete Denial. [This S fails to 'indicate' $\mathfrak{S}$.] *E.g.*, 'this was not due to carelessness'.
  - (6) Concrete assertion of Difference. [This S differs from $\mathfrak{S}$.] *E.g.*, 'John and William are not alike'.

essential part of which recurring S will recur: true, but we do not often find this doubted. The point of practical importance is *what* prior events does S indicate. Or, again, every existing human being has certainly had (*i.e.*, indicates the prior existence of) a human grandfather: this also is too axiomatic to convey practical information, though we may want to know the name or the special characteristics of the grandfather in question. Almost but not quite equally rare is it to find complete invariability of sequence asserted (except thus vaguely) when the reference is forward in time. A shot through the heart or brain is perhaps invariably followed by death, and if there were interval enough between the two events we should say the former indicates the latter as sure to happen: but favourable seed-time does not necessarily indicate abundant harvest, since in the interval some unforeseen counteraction may arise, or at the seed-time itself along with certain favourable conditions there may have been an unsuspected enemy sowing tares. So, again, we may often predict too vaguely to be of much real service. Sunshine, we know, for instance, always follows rain, and may be expected sooner or later, but what we most want to know is *when* to hope for it, or under what exact conditions; if within our power to compass.

Accordingly, abstract assertions of succession are commonly made with a large margin for the unforeseen. We feel fairly contented in obtaining any hint of 'law'—any knowledge, that is, which may form a basis for even imperfectly secure inference and proof. The only alternative to 'Chance'[1] is often 'Tendency,' and in our gladness to escape from Chance we dignify this as 'Law'. An abstract assertion pointing backwards has, then, to deduct from the trustworthiness of its asserted indication in order to allow for the possibility of other causes producing the same effect; and this even where we possess a real 'Causal Law'. It is a real law for example that a certain dose of a certain poison (barring antidotes) invariably causes death. But still we are very far from being able to say that death wherever found indicates the past presence of this particular poison. And in like manner every abstract assertion pointing forwards in time has, almost in proportion to its definiteness

[1] By 'Chance' is meant in this connexion no more than the contradictory opposite to 'known law'. Some law there is (now-a-days) always assumed to be, but that the conjunction is due to 'Chance,' means really that no amount of limitation of S or of Σ will give us a known law between the two things so designated.

and consequent practical value, to allow for possible antidotes or counteraction.

In abstract assertions of co-existence we can attain much greater certainty of indication, but even here large use is made gratefully of incomplete laws—indications only roughly trustworthy, true only on unexpressed conditions. We may know for instance that boys 'as a rule' are mischievous, and may make real use of the knowledge, without being at all able to generalise the exceptions so as to state a quite invariable law. If we could truly say, *e.g.*, 'all boys except those who are physically deformed are mischievous,' our indication would be of far greater value than while we can only say 'the majority' or 'all but comparatively few' or any other vague limitation.

In the concrete proposition, on the other hand, (except as will be presently seen, in the case where S is said to *deserve the name* $\mathfrak{S}$), there can be no talk of the assertion being roughly true. The given S was either as a fact preceded by $\mathfrak{S}$ or not; $\mathfrak{S}$ either will or will not be among its consequents in time. Here accordingly it becomes still more important to recognise the 'plurality' of causes and their liability to counteraction; and hence the purpose of distinguishing the two kinds of assertion, namely those with a backward and those with a forward reference—assertions explanatory or detective, and those which predict. As regards the descriptive or classifying proposition (where S is said to deserve the name of $\mathfrak{S}$), here a little more latitude seems inevitable. Names are altogether so loosely applied—their correct meaning varies habitually within such wide limits—that, in giving S a name not already assumed to belong to it of right, we may well be content, in many cases, to come somewhere near the mark. Is this man civilised, intelligent, learned, unsteady, idle, brave? Even when we judge his character accurately in *fact*, very many of such questions might admit of the double answer, Yes and No.

As, then, in the case of explanatory or detective propositions the main difficulty flows from the 'plurality' of causes, and in predictive propositions from the liability of one cause to be 'counteracted' by others; so in propositions of co-existence the danger is that of taking for essential something that is accidental merely—*i.e.* of believing 'always' when the real truth is 'sometimes'. For if the proposition be concrete (as 'this man is a fool') it still professes abstract knowledge—knowledge of the essential qualities which go to form the meaning of the predicate in question.[1]

[1] See Note *, p. 42.

The Law of Counter-indication.

As the presence of one thing may indicate the presence of another, so may presence indicate absence, or absence indicate presence, or absence indicate absence. All these are of course equally assertions of indication. Thus a negro's coloured skin may be asserted to indicate the presence of a cheerful temperament, or the absence of certain other qualities; and the absence of pain, in certain cases, to indicate the presence of paralysis or the absence of inflammation.

On any view of logic, the real *pons asinorum* is the group of facts here to be generalised under the one 'Law of Counter-indication'.[1] This law may be said to lie directly at the root of the ordinary doctrines of Conversion and Contraposition, of Hypothetical Inference and Proof, and consequently of the first and second figures of the Syllogism; and in a less direct manner its importance is traceable throughout. Difficult though it is to state the law in perspicuous language, and intricate though some of

[1] Mr MacColl, who formulates essentially the same law (*loc. cit.* p. 54) adopts for it the name of 'Contraposition'. But Contraposition, in its usual meaning seems never to have had quite so wide an application, and therefore I think 'Counter-indication' less ambiguous.

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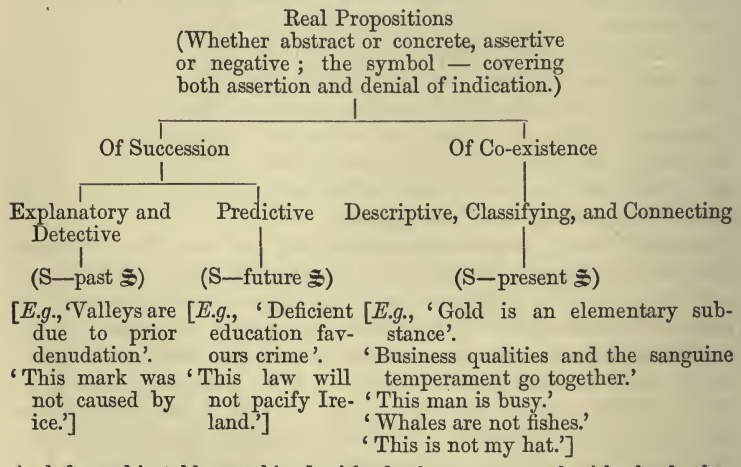
* (From p. 41.) Putting the results of this section into a table we get :—


Real Propositions
(Whether abstract or concrete, assertive or negative; the symbol — covering both assertion and denial of indication.)
Of Succession
Of Co-existence
Explanatory and Detective
Predictive
Descriptive, Classifying, and Connecting
(S—past S)
(S—future S)
(S—present S)
[E.g., 'Valleys are due to prior denudation'. 'This mark was not caused by ice.']
[E.g., 'Deficient education favours crime'. 'This law will not pacify Ireland.']
[E.g., 'Gold is an elementary substance'. 'Business qualities and the sanguine temperament go together.' 'This man is busy.' 'Whales are not fishes.' 'This is not my hat.']

And from this table, combined with the former one, and with the further cross-division resulting from 'laws only roughly true,' a full table of the questions arising for Proof may now be readily drawn up.

its consequences may be, the law itself is really extremely simple, and once grasped can hardly be forgotten afterwards. It needs, however, some special definition in order to overcome in the first place the difficulties of statement.

The language used in the first paragraph of this section is, until further explained, hardly general enough to express all that is intended, and is only chosen because no other names, more comprehensive than 'presence' and 'absence,' appear to be available. The presence or the existence of a thing or quality, the happening of an event, the truth of an assertion, stand on one side of the opposition intended, as contrasted with the absence or the non-existence of a thing or quality, the non-happening of an event, the untruth of an assertion. And, for brevity and convenience merely, I wish for present purposes to extend the use of the two terms chosen, in order to cover these diverse meanings. Accordingly such assertions as that 'human beings indicate human parents,' or that 'the existence of discontent in India indicates bad government,' or that 'the falling of a stone indicates the force of gravity,' or 'if he is well he will certainly go,' &c., are all cases of 'presence' indicating 'presence' in the sense intended. And so with the indication of absence by presence, and of absence or presence by absence. The two words are not to be understood as strictly limited to their ordinary sense, but as stretched to include the wider meaning postulated as above for the sake of simplifying the expression.

Now since we mean by S the whole of that 'thing' which constitutes the sign or *datum*, and by $\mathfrak{S}$ the whole of that which the sign signifies, it is clear that if we employ symbols to express respectively that thing the *presence or absence* of which may indicate $\mathfrak{S}$, and that thing the presence or absence of which may be indicated by S, we cannot use S and $\mathfrak{S}$ themselves for such a purpose without incurring misinterpretations. Instead of them it would be better, where necessary, to use the corresponding small letters *s* and $\mathfrak{s}$. Thus if the presence of a steady pulse indicates absence of fever, 'steady pulse' and 'fever' are respectively *s* and $\mathfrak{s}$, 'the presence of a steady pulse' is S, and 'the absence of fever' is $\mathfrak{S}$. Finally if we call that S or $\mathfrak{S}$ which expresses the presence of *s* or $\mathfrak{s}$ a positive one; and that which expresses their 'absence' a negative one; and if we call their positiveness or negativeness their *quality*; and the change from positive to negative, or from negative to positive, a *change of quality*; the law may be stated as follows:—

All indication of $\mathfrak{S}$ *by S (affirmed or denied) is expressible as*

indication of S by $\mathfrak{S}$ (affirmed or denied) if, and only if, the quality of both S and $\mathfrak{S}$ be changed.

The table given below[1] expresses the results of the law concisely, but a few examples will help to make them clear.

Take first the assertion that 'every corrupt tree bringeth forth evil fruit' (*i.e.*, presence of corruption in the tree indicates ditto in the fruit), then the equivalent form of this, and the sole *indication* implied, would be 'absence of corruption in the fruit indicates absence of corruption in the tree'. What the proposition does *not* tell us, but what may perhaps be known to be true from other sources, is either that corruption in the fruit indicates corruption in the tree (*i.e.*, 'every tree that bringeth forth evil fruit is corrupt')—which, of course, would be the simple converse of the original proposition,—or that soundness in the tree indicates soundness in the fruit,—which would be the 'reciprocal'. From the original proposition we can indeed get the *denial* of any such law as that corruption in the fruit indicates soundness in the tree (*i.e.*, 'some corrupt fruit is the offspring of a corrupt tree'); but this, being a denial, is not itself a statement of indication: the sole indication is that which in the *A* and *O* propositions is usually called the contrapositive, in *I* and *E* the simple converse, and which in all propositions is here called the counter-equivalent.

Or take next the assertion that 'light-haired races are not given to revenge' (*i.e.*, light hair roughly indicates absence

[1] Thus, if we write 'non-S' for 'negative S' or 'absence of *s*,' and the same with $\mathfrak{S}$; the sole *equivalent* of :—

(1)	S indicates $\mathfrak{S}$,	is	Non-$\mathfrak{S}$ indicates Non-S	(cf. contraposition of *A*)
(2)	S ,, non-$\mathfrak{S}$,	,,	$\mathfrak{S}$,, Non-S	(cf. simple conversion of *E*)
(3)	Non-S ,, $\mathfrak{S}$,	,,	Non-$\mathfrak{S}$,, S	(cf. exclusive disjunction)
(4)	Non-S ,, non-$\mathfrak{S}$,	,,	$\mathfrak{S}$,, S	(cf. No. 1, above)

And the sole equivalent of :—

(5)	S fails to indicate $\mathfrak{S}$,	is	Non-$\mathfrak{S}$ fails to indicate Non-S	(cf. contraposition of *O*)
(6)	S ,, ,, non-$\mathfrak{S}$,	,,	$\mathfrak{S}$,, ,, Non-S	(cf. simple conversion of *I*)
(7)	Non-S ,, ,, $\mathfrak{S}$,	,,	Non-$\mathfrak{S}$,, ,, S	(cf. No. 3, above)
(8)	Non-S ,, ,, non-$\mathfrak{S}$,	,,	$\mathfrak{S}$,, ,, S	(cf. No. 5, above)

of revengefulness). Of this the formal equivalent would be that the presence of revengefulness roughly indicates darkness of hair ('revengeful races are not light-haired'). This example serves well to bring into relief a fact which interferes largely with what may be called the *positive* utility of the law, —the fact, namely, that *s* is often a mark whose presence or absence is much easier to recognise than that of $\mathfrak{s}$. It is easier to see at a glance whether or no a man is light-haired than whether or no he is revengeful, and we should therefore more often argue from S to non-$\mathfrak{S}$, than from $\mathfrak{S}$ to non-S. The chief value of the law is rather restrictive than inferential, namely to prevent our supposing the 'reciprocal' necessarily true. The readiness to accept the 'reciprocal' as equivalent is one of the strongest tendencies in human nature, and also (perhaps, indeed, this is the main explanation of the fact) one of the most fruitful as regards the earliest guesses at unknown truth: for though $\mathfrak{S}$ (or non-S) may not exactly indicate S (or non-$\mathfrak{S}$), it is often so closely connected with it by causation that in finding where such indication fails we hit upon the real law. Nevertheless, in Proof as distinct from Discovery, the tendency is fatal, and needs to be held in severest check. A certain proportion of indications there are—a comparatively small proportion however[1]—which do, as a fact, cut both ways; thus, no doubt, even more than roughly speaking, evil fruit indicates an evil tree. So too while a certain label on a bottle shows that it came from a certain firm we are also often told, in the same breath, that 'without it, none are genuine'; and while equilateral triangles are equiangular, equiangular triangles are equilateral. But none the less is it unsafe to generalise, as the uninstructed mind is apt to do from these occasional cases, that mutual indication is the rule, and one-sided indication the exception. Probably the prevailing attitude amongst the illogical is best expressed as the belief that any law, in the absence of proof to the contrary, involves a 'fair presumption,' at least, that the reciprocal is true; while fair presumption is not worth distinguishing from 'practical certainty': the real fact being, of course, that the most an abstract indication ever involves (and that not always) is a fair presumption that the question as to the 'reciprocal' is worth the labour of investigation. It seems unnecessary here to say more about the practical value of the law of counter-indication: it merely binds up into one scheme rules whose utility is well-known. This is the case at least as re-

[1] See Prof. Bain on 'Material Obversion,' *Logic*, i., p. 111; also Wundt, *Logik*, pp. 214, 245, 317, &c.

gards the universal affirmative and the particular negative: perhaps, however, the ease with which the exclusive disjunctive is commonly liable to be taken for the mere assertion of difference may be a less familiar fact.

Nor need we here set out examples in all the eight varieties introduced by varying the quality of S and $\mathfrak{S}$, and by the difference between assertion and denial of the indication. But it remains to ask how far the law is applicable to concrete propositions. The answer seems to be that, though formally implied, the counter-equivalent is in concrete propositions never directly needed. This is in fact the extreme case of what was noticed in the example of the light-haired races. If S be a concrete 'thing,' we have other marks, more readily applicable than non-$\mathfrak{S}$, by which to prove its absence: it is in fact known to us mainly by means of its attendant circumstances as a whole; and $\mathfrak{S}$ is only one of these, and (by hypothesis) not the most familiar. We can, indeed, apply counter-indication to concrete matter in some such way as this: suppose the concrete proposition to be 'this murder indicates greed of gold'; if we are certain of this, and also of the fact that in a given prisoner's case the greed of gold was absent (non-$\mathfrak{S}$), we no doubt may infer that this murder was *not* (non-S) committed by him. But here of course it is not 'this murder' whose existence we get denied, but the truth of the theory that it indicates the prisoner as its cause: it seems that the result is obtained circuitously, by means of the abstract indication involved—namely, '*anyone* who committed this murder must have had a greed for gold,' or 'the abstract possibility of this murder indicates such motive,' and this motive was absent in the case before us: hence, *in the case before us* 'this murder' was absent too. This is rather a highly elliptical syllogism than a case of immediate inference.

There is one further precaution to be observed in using the law—a precaution, however, which is probably too simple to require notice, except so far as symbols are employed. And perhaps the reader already recognises[1] that half the mental confusion that exists is really due to the use of symbols,—whether such symbols are imposed upon us by the real need for abbreviation (as *e.g.*, in the case of general names), or by what may appear to be the wanton pedantry of logicians. It is easy enough, for instance, to see that the proposition 'every man is an animal,' does not imply that every animal is a man, though possibly some people might be puzzled by the question if A and B were substituted for man and

[1] With Mr. Keynes, MIND XV., 366.

animal. *Latet dolus in generalibus.* But here the source of possible confusion to which I wish to draw attention is that due to the *time*-element in indications. Where propositions of co-existence are in question, no difficulty can possibly arise, but in the case of succession it may be worth while to notice that where S indicates (or fails to indicate) *future* $\mathfrak{S}$, non-$\mathfrak{S}$ indicates (or fails to indicate) *past* non-S, and where S indicates (or fails to indicate) *past* $\mathfrak{S}$, non-$\mathfrak{S}$ indicates (or fails to indicate) *future* non-S. Practically, where actual examples are employed, the danger is not likely to arise; but, in the absence of an express caution, there might perhaps be a tendency to suppose that 'S indicates *future* $\mathfrak{S}$' is equivalent to 'non-$\mathfrak{S}$ indicates *future* non-S'; with which indication (as would be seen at once when translated into full language) it has really nothing to do.

There remains little more to be said, in this place, about the subject-matter of Proof, except to admit as unmistakeably as possible that the view of propositions here taken, and the classification here made, is far simpler than would be required for almost any purpose other than ours. For Psychology certainly, and also for the doctrine of Inference in general (as contrasted with reflective Inference, or Proof), very much more would be needed. But in Proof we start always with some *completed* judgment, some judgment developed so far as to be expressed, reflected upon, and its validity called in question: hence the growth or formation of the judgment from its earliest traceable stages is of no direct concern to us. Many of the varieties of grammatical structure correspond roughly to shades of meaning which vary both in definiteness, in strength of assertion, and in richness of implication. These are in themselves of high importance: but before the interest in these arises, we need to keep perfectly clear the first broad distinction between proven and not-proven. For such a purpose, the plan which commends itself alike to common-sense and to logic is that of treating the proposition as something put before us in an already formed condition; put forward, that is, as conveying intelligible meaning and deserving intelligent belief. By considering it a pretender to these qualities, and then proceeding to inquire how far it actually falls short of attaining them, we best arrive at some notion of its real position on the long scale between worth and worthlessness. Keeping this end in view, we start fair to consider in detail the series of possible objections that can be brought against any thesis set up as worthy of belief.

ALFRED SIDGWICK.

III.—ON SOME POINTS IN ETHICS.

I have been recently struck with the persistent endeavour to father upon Bentham the "Greatest Happiness of the Greatest Number" in its most literal interpretation. I have often wished that we could collect his various expressions at different times, and add to these what we know from private sources; the effect of which would be to dispel for ever the notion that he would take away the happiness of a small number, in order to make a greater total, when it was spread over the larger number. We know well enough that he confined himself, ultimately, to the simple expression "Greatest Happiness"; and for his more particular views as to the distribution of happiness, we must be guided by the general drift of his writings. Any one referring to the *Morals and Legislation* sees that his use of the Greatest Happiness test was, in the first instance, *negative*. It was set in opposition, on the one hand, to asceticism, and, on the other to the systems that, in Bentham's view, evaded all appeal to a test.

I think Bentham's mistake, so far as he was mistaken, consisted in the *positive* employment of the phrase "Greatest Happiness". He drifted imperceptibly into the untenable ground, that the Moralist, or Moral Legislator, passes through his hands the entire happiness of mankind, and distributes it with such skill that the individuals are provided for in the best possible way; in fact, economises the collective means of the human race. And it must seem to any one, that paternal, maternal, grandfatherly, grandmotherly legislation, all together, at their utmost stretch, are as nothing to this enormous assumption of plenary powers. My opinion is that as soon as we rid the ground of systems that set aside human happiness as an end, and we propose to work the test positively, the very first thing is to distinguish between the forms of happiness that come properly under ethical consideration, and those forms that lie wholly or partly out of the ethical province. The vast problem cannot be simplified too soon.

In effect, Bentham had to come to this, but not until he was deeply committed to the theoretical error, and so had laid himself open to an infinity of criticism that should have been avoided. One mode of confirming the wrong impression was his following up his announcement of the Greatest Happiness principle with an exhaustive catalogue of

Pleasures and Pains, unqualified by any statement of limitation to the purposes of Ethics properly so called. It is quite evident that Ethics has to do with the pleasures and pains of mankind, but it is equally evident that each one of us has a large sphere of individual option and self-guidance; where, in short, we are happy or miserable after our own way. Within this sphere, we may be moved by information, and advice, and example, but not by ethical dictation. A good Hedonistic calculus would be available in both regions; but is not necessarily the same for both.

Although the distinction between the ethical and non-ethical province of Happiness is slurred over at the commencement, by Bentham and others, it inevitably re-appears in the details, but not to the same advantage as if it were posited from the first. A haziness has already over-spread the Ethical Problem, and remains about it to the last.

Two departments of knowledge are preparatory to Ethics however we may treat it; these are Hedonism and Sociology. Both have to be constantly appealed to, and they are, therefore, either pre-supposed, or else discussed as the occasion requires. The best plan of bringing them forward would be to make a preparatory survey of each, carried so far as, and no farther than, they are actually needed for the purpose in hand. A Hedonistic introduction would force on the discrimination between Ethical and non-Ethical Hedonism, and might thus save the main subject from the evils of confusing the two. The preliminary Sociology would probably confirm the distinction in a way of its own, while serving many other purposes. Indeed, the Sociology would be necessary to complete the Hedonistic survey, although not necessary for the commencement of it.

Of these two preliminary subjects, Sociology we know in some measure, but what of Hedonism? Is there any scientific treatment of it now in existence. The supporters of Utility have been always aware that a theory of Happiness was involved in the carrying out of the system. Paley, accordingly, tried his hand in the matter, but what he did rather weakened than strengthened his main position. Bentham's scheme was much more elaborate and thorough, but, except in his doctrine of Punishments, he did not carry it out to Ethical applications. John Mill's attempt to sketch the constituents of happiness was not a success. Deterred by such examples, Mr. Sidgwick has gone to the other extreme, and has set forth the difficulties of Hedonistic calculation with such unqualified vigour, as almost to amount to a *reductio ad absurdum* of all ethical reasoning. Any one professing to found a

scheme of Hedonism could hardly do better than start from his arguments for its futility, and endeavour to rescue some fragments from the wreck.

If, after a fair trial, we are obliged to pronounce a Hedonistic science unattainable, the consequences are somewhat serious. If I am not allowed to lay down any definite formula as to the production of human happiness, I must refuse to be bound by the very indefinite formulas in general circulation. If I cannot state with some precision, for example, the relations between happiness and work or occupation, I cannot allow to pass unchallenged such vague commonplaces as—that work is a sovereign remedy for any and every form of misery.

In affirming the impossibility of a Hedonistic science, the fact is overlooked, that science has many degrees. The termination of the human race will not see a science of Pleasure and Pain made as definite as the sciences of Heat and Chemistry; but we may conceivably improve upon the crude statements of the unscientific multitude, and every such improvement is so much science. To draw a distinction between two things hitherto confounded, or to qualify a rule that previously was unqualified, is to make a real advance, however many more advances may be desirable. The remark obviously applies over the entire compass of the mental and social sciences.

It is my present purpose, however, to widen the issue, and to dwell upon the relations of our existing Psychology as a whole to our existing Ethics. In so doing, I shall refer for illustrations to Mr. Leslie Stephen's *Science of Ethics*. While greatly admiring the ability of the author's handling of many of the topics that came within his range, I am compelled to differ in some respects both from his method and from his conclusions, and I find that my difference mainly turns upon his mode of bringing in Psychology to the elucidation of Ethics.

If I were to begin a work on Ethics, I should like to follow the mathematician who had read Virgil, and ask myself what I mean to prove. The end is the clue to the means. Ethics in the hands of one class of writers, as Adam Smith, Dugald Stewart, and Mackintosh, means the discussion of the two questions of the Moral Sentiment and the Ethical Standard. The second of these must come up under almost any mode of treating Ethics. The first is not so pressing; but, in the new Evolution Ethics, it is included equally with the Standard. Psychology by itself, and also in company with

Sociology, is obviously needed in all discussions respecting both questions.

While these old-standing disputes are not the whole of Ethics, they are pre-supposed in every region of the subject. Thus, to mention some of the other lines of treatment. The reason or justification of the existing Ethical Code is what largely occupies Mr. Stephen's work, and is necessarily the substance of the common didactic treatises. Paley's definition of Moral Philosophy couples our Duties with the *reasons* of them.

Again, supposing we are dissatisfied with the existing Ethics in some points, we are bound to justify that dissatisfaction and to propound a plan of Ethical Reform. If Mill had written his work *On Liberty*, according to his first conception of it, as privately stated, namely "to point out what things society forbade that it ought not, and what things it left alone that it ought to control"—he would have produced a work on Ethical Reform, instead of simply pleading for Liberty as such. His new rules that he wished to impose are simply named, without reasons or expansion, although requiring a no less ample treatment than the rules that, under the name of Liberty, he desired to see revoked. And, in this department also, the questions of the Moral Faculty and the Moral Standard come up, with all their Psychological and Hedonistic implications.

Farther, the Classification of Moral Duties, followed out into minute detail, is a branch of Ethics too much slurred over, and deserving of a specific treatment. The various Ethical problems would still crop up, but they should be kept in subservience to the main purpose. To start from the usual threefold division of the cardinal virtues—Prudence, Justice, Benevolence—and to divide and subdivide, until we reach the more concrete and recognised designations of virtue and vice—is a task fitted for the acutest mind. Nothing that can be called thorough or satisfactory has yet been achieved in the department. Although the Hedonistic and other problems would seem to be put aside in such an attempt, they could not be so really.

Still farther, the department of Ethical Homiletics, or Moral Suasion, would open up a distinct field of Ethics, with difficulties of its own. Yet these could not be met without having before us all the compass of Ethical Duties, and their Sanctions and Motives, as furnished by the experience of ages, criticised and corrected by the science of Mind. How to apply the moral forces at our disposal, so as to overcome the rebellious impulses of human nature, is something

more than the Rhetorical art of Persuasion. It includes the tact and management of parents, teachers, authorities, and all those that are in any way responsible for the moral training and control of human beings.

Once more, there is another region of Ethical discussion respecting the nature of Virtue; namely, to supply guidance to the virtuously disposed man, in cases of difficulty. This is the old casuistry. It is, as it were, the conscientious man's "Best Companion". Both under Justice and under Benevolence, there occur positions of perplexity; some of which, indeed, are irresolvable, while others can be cleared up by the application of Ethical principles. We shall find that Mr. Stephen occasionally comes across instances of conflicting obligation, and shows his usual subtlety in disposing of them.

This last department does not yet exhaust the field of human conduct; there remains the art of Prudence, as regards Self, which, as being one of the recognised cardinal virtues, and as touching our Social Duties at many points, seems to be legitimately included under Ethics. For my own part, however, I would much rather see it kept quite apart. It is the art of Happiness, or making the most of life, and needs a quantity of minute consideration of ways and means, far beyond what is required for determining social duty. It is, in fact, the most difficult of all arts. A perfect theory of Hedonism is not needed as a guide to Justice or Benevolence (though, of course, it would be of use in those regions of conduct); it is needed for the pursuit of individual happiness. Prudence, as a *virtue*, means simply the preservation of our individual efficiency, with a view to our social duties. It does not comprise the highest economy of our means for individual happiness. Indeed, society would be jealous of the devotion to this ideal, as possibly interfering with the sacrifices that our proper duties might involve.

As I wish specially to ascertain what are the bearings of Psychology on Ethics, I am concerned to point out, in the first instance, how well we have got on without a science of Mind. The remark last made is germane to this inquiry. I concede the value of a Hedonistic science (which would presuppose an advanced Psychology) in the art of Individual Happiness; I do not admit its importance, in the same degree, for the Ethics of Duty. Our present Ethics has been arrived at, without any Psychological aids whatever. Those enormous difficulties of calculating human pleasures and pains cannot have oppressed mankind generally, as they do our ethical philosophers. How is this?

My first answer is to recall attention to the character of the primary moralities—those that are involved in the very existence of society. There is unquestionably a process of calculation here; but, on the one side, stands the preservation of the race collectively, on the other, the pleasures of a few individuals. It is needless to dwell upon this aspect of the case.

The next answer consists in noting the practice of transferring subjective comparisons to *objective equivalents*. Of all the modes of overcoming the difficulties of Quantitative computation in Mind, the one most prevalent is, to fix, rightly or wrongly, on certain outward facts that are looked upon as concomitants of the internal states, and to measure these accordingly. A few examples will suffice.

Take the case of external injuries to the person. All men do not feel precisely alike under the same bodily hurt; but we presume that two contusions will cause greater suffering than one. We can even make allowances for certain obvious differences of constitution as the relative strength, or age of the sufferers, and the comparative times of recovery. Next, as regards Property. We take for granted that a man's feelings will follow the extent of his losses, as compared with his means. Seeing that three-fourths of all the advantages and disadvantages of life can be brought under a money-value, the region of strictly subjective estimates is reduced to a limited compass. The pleasures and pains of Reputation have all their outward expression and estimate. A man is happy according to the number of his friends and admirers; and the admiration of each has its outward measure not to be mistaken. The law grants reparation for slander, by giving a value to the terms used, without inquiring minutely into the natural feelings of the sufferer, except in so far as some outward circumstances can attest their speciality. "Whoever is angry with his brother without a cause shall be in danger of the judgment: and whosoever shall say to his brother, Raca, shall be in danger of the council: but whosoever shall say, thou fool, shall be in danger of hell-fire". I can hardly conceive a more puzzling case for Hedonistic calculation than the comparison of worldly possessions with the sanctity of the human remains after death. Yet the general public makes no difficulty in equating the two, and the administrations of the law give effect to the equation. A bad case of tomb desecration is treated as the equivalent of a middling burglary; and the valuation passes as satisfactory.

The truth is that, in the primary morality, the difficulties

of calculation are seldom an obstacle to our moral judgments. It is only by the slumping of Security with our collective interests under one comprehensive title—Greatest Happiness —that an argument can be founded on such difficulties. When social preservation is once attained, and when we begin to think of improving our arrangements so as to increase our collective pleasures, we have to calculate much more narrowly; we have not often the overwhelming majority of reasons that makes us punish the thief and the murderer. Still, it will be found that the calculation is always transferred from the feelings themselves to an objective rendering, and that the difficulty of verifying that rendering seldom presses upon us. It wants a very close attention to the details of social duty, to discover the places where a Psychological Hedonism, and Psychology in general, come specially into play.

But before encountering those cases in Mr. Stephen's handling, I must first notice the properly Metaphysical problems that have found their way into Ethics. I agree with Mr. Stephen's version of a Metaphysical question, as contrasted with a Psychological. The chief example is Free-will, which, I apprehend, need never be introduced into Ethical science, considered as the investigation of Duty. There are cases of individuals that have been plunged into mental distress by the difficulties of Free-will and Fatalism, and for such persons some comfort should, if possible, be afforded. But I lay down provisionally, as the test of a Metaphysical question, the circumstance, that the holders of opposite views regarding it accept the same rules, and act in the same way in their practice. So long as I find that a Determinist and a Free-will advocate employ identical motives under identical circumstances,—deal out punishments, rewards, persuasion, on precisely similar estimates of their effects,—I regard the question, whatever importance it may have otherwise, as devoid of Ethical bearing.

I now proceed to notice Mr. Stephen's handling of Psychology in relation to Ethics. His first estimate of the existing state of Psychology is rather despairing. "To ask which are the primitive and elementary passions, how they are related, and how the derivative passions are compounded, is to ask questions which admit of no definite answer." In other words, Psychology has not yet begun to be; for, hitherto, the analysis of compound states is its only pretension. Sociology cannot be much more advanced. "The

intricate actions and re-actions between different elements of the individual and the social organisation" defy all attempts at resolution. Still, it is on this side that the ethical problems can be attacked. And, in particular, a new light bursts forth in the darkness with the "perception that society is not a mere aggregate but an organic growth".

Mr. Stephen's statement of the Ethical problem is, "to discover the scientific form of morality, or to discover what is the general characteristic of the moral sentiments". This would seem to indicate the old question as to the nature of the Moral Faculty, but it really includes the Standard also. "Ethical speculation must, as thus understood, be implicated in psychological and sociological inquiries," notwithstanding the treacherous foundation of all such. He proceeds at once to attack the psychological problem of "the emotions as determining conduct". Of course, it is the general law of the Will, that we are moved *to* pleasure and *from* pain. It may be doubtful whether any ethical discussion requires to qualify this until we reach the problem of pure altruistic conduct. Bentham, at least, was satisfied with the general statement, when he gives, as the first sentence of his book: —"Nature has placed mankind under the governance of two sovereign masters, *pain* and pleasure. A man may pretend to abjure their empire; but in reality he will remain subject to it all the while." And the fact is incontestable, that we can carry on the government of mankind, on the assumption that they are attracted by pleasure, and repelled by pain, according to their known amount. Still there are cases where the law does not strictly hold; we are sometimes, for example, dominated by a painful idea, there being a partial paralysis of that very power of the will that should rid us of it. I doubt if this case comes up often in Ethics as a necessary; it is rather a luxurious refinement in our management of ourselves and others.

I consider that the important exceptions to the law of Pleasure and Pain, are (1) Fixed Ideas, (2) Habits, and (3) Disinterested action for others. Under each one of these heads, there is, I conceive, a motive power to conduct, without any reference to pleasure or pain. Mr. Stephen seems bent on making out, that, in every case, the pleasure or the pain is the operative factor. I have not space to discuss his examples; and I need not reproduce those that I myself rely upon, for showing that the fixed idea is a power in opposition to the normal law of the will. And when Mr. Leslie generalises pain as representing tension, and pleasure equilibrium, I venture to think that his survey of both fields

is defective. His examples of pain are all of the acute sort; and he does not exemplify pleasures at all. In the act of taking food, the felt pleasure is an energetic spur, and equilibrium is not attained till satiety stops the pursuit. Mr. Stephen allows for the case of painful fascination, but he does not see in it the extreme instance of a law that in all degrees operates against the general law of the will.

I must here remark on Mr. Sidgwick's treatment of the difficulty, in his recent criticism (MIND XXVIII.) on Mr. Stephen's work. In his view, "the feelings that normally cause action are not pleasures and pains as such, but *desires and aversions*". This gets over the exceptions to the operation of pleasure and pain, but, as I think, by evading, rather than meeting, the difficulty. It is not exactly the same as to assume that *because* we act in particular ways, to do so *must bring* us pleasure or remove pain; but it goes a good way in that direction. Desire and aversion are so close upon will, that what they are, the will is almost sure to be; they are, in fact, will begun. Supposing that we are moved by something not a pleasure,—say by a habit continuing after its reason is passed away,—that movement will take the shape of desire, if there be any delay in carrying it out. So, in sympathy, we desire the good of others, and, if that desire is thwarted, we have an incidental pain, but that pain is not the prime motive of the desire or the sympathy. There remains still the question—why are our desires ever called forth by what is not pleasurable in itself, or our aversions by what is not painful in itself. All our explanations must start from pleasures and pains, viewed in their purely emotional aspect, and we must give an account of the transition from the non-active to the active, or volitional, aspect.

Mr. Stephen's section on the Reason as determining Conduct is, I think, admirably worked out. The crowning inquiry—What is the most reasonable conduct absolutely? leads him to discuss what he calls Types of character; and this resolves itself into the question—What is the relative value of different kinds of efficiency? and this again into the meaning of Utility, and theory of pleasure and pain, as connected with the vitality of the system. At this point, he leaves the Individual to take up Society, with its interests and motives, and devotes a chapter to the relations of the Individual and the Race; all which I regard as thoroughly in point as a preparation for Ethics. The doctrine of Evolution must be credited with this improvement in the mode of attacking the Ethical problem. The nature of the corporate sentiment is remarkably well set forth. The

struggle for existence is fully allowed for; and the right of the stronger made somewhat painfully prominent. Next follows a chapter on the Moral Law considered as to its form and origin, as distinguished from its contents. The law must be natural, not artificial; it must grow, not be made; it must express the conditions of social vitality; it must be capable of expression as a law of internal character, not as a law of external facts (Do not hate, for Do not kill); it must be supreme, it must be social, and not mere individual self-preservation.

Now as to the Contents of the Moral Law. This includes the Cardinal Virtues; and the mode of handling them brings out a peculiarity of the author that is open to some remarks. He begins thus:—"The law of nature has but one precept, 'Be strong'. Nature has but one punishment, 'decay and death'." Be strong, individually, means Be prudent; Be strong, socially, means Be virtuous. Starting so, the author's first cardinal virtue is Courage. The value of this attribute, the conditions and modifications of it, are well stated; yet I must demur to the supposition underlying the whole, that, by mutual fighting and destruction of the physically weakest, the race has been necessarily progressive. The author does not neglect to remark that strength may be valuable in co-operation, as well as in mutual hostility; but the stress of the exposition lies in the warlike situation, where strength is opposed to strength, with mutual destruction of equal portions, and the survival of the difference between the strongest and the next strong. We have thus the paradox of strength existing merely to annihilate both itself, and an equal quantity of other strength. Fitness for the conditions of life, on which the author dwells so much, is fitness to beat, and not to be beaten; and we are obliged to call this progress, merely because, in some instances, the beater has been the better of the two.

The cardinal virtue of Temperance is discussed at length in its social bearings. The author is somewhat too sweeping in his propositions here. I think he exaggerates both the prevalence and the bad effects of gluttony, for example. When he says—"the man who is a slave of his belly is less capable of all the higher affections, of intellectual pleasures or refined enjoyments, and presumably selfish and incapable of extensive sympathies," he overlooks a very common occurrence, namely, that devotion to the pleasures of the table may be the one weakness of a very elevated character—a weakness having its root in the severe strain of an arduous life. Because society expresses itself strongly upon the sins

against Temperance, it does not follow that they produce a corresponding degree of social mischief.

I have much more to say on the author's handling of the next of the cardinal virtues—Truth. He puts in the true light the social value of truth, and points out many of the allowed exceptions, some of these having also a social value. Still, I think there is a want of thoroughness, even while the essential ideas are expressed. It is justly remarked, that the enormous stress put upon truth is due, in great part, to the fact that it is so well defined. If telling a lie were as incapable of precise definition as temperance or filial respect, people would not be so ready to fasten upon every instance of it. The exceptions to literal truth-speaking are so numerous as to render its position among the cardinal virtues very questionable, without affecting its value. Indeed, the most important aspect of the virtue—the taking pains to assure ourselves of the truth of our affirmations—is absolutely made light of. Among allowable exceptions, we must begin with the right of individual Privacy, which excludes all prying demands on the part of others, and justifies deception when invaded. This is a very large and important field; there is nothing corresponding to it in the other virtues. Next, the case of war is always admitted; a victorious general is especially applauded for his "masterly deception" of the enemy. There is not the same free permission to deceive in the internal warfare of society, the fight of parties, and the rivalry of interests; but, in practice, deception is general here also. The man of respectability generally keeps clear of telling a downright lie; but, in order to do so, he has often to act a lie. Not merely concealment, but feints and false lures, are freely admitted in the struggles of party; if one party is unscrupulous, the opposing party cannot be above board, without incurring loss. Then, again, to smooth the intercourse of life, which the *brusquerie* of open avowals of opinion would sadly impair, we are obliged to say what we don't believe. Charles Darwin told me of a female relative of his, who could not say "I am glad to see you," to an unwelcome visitor; this was very high virtue, but would be fatal to the wife of a leading politician in London. So, flattery is often exaggeration: Mill would be considered over-severe in his dictum, that flattery should not be allowed to anyone that could not keep it within the bounds of truth. The giving of characters and testimonials to candidates for office, is almost always so far mendacious, that the known defects of the party are not so explicitly stated as the merits; very often they are entirely omitted.

The licence of counsel is a well-known case. Pious frauds are known in all ages. These are now discountenanced; yet there is no proposal to discountenance habitual exaggeration in setting forth the beneficial consequences of virtue, and the evils of vice.

It is undeniable that society depends very much upon trustworthy information. But, there is an important qualification. A fact once stated by a good authority is established; its iteration by a hundred other persons adds nothing to its effect. Thus, while everybody must be just, if only a select and known number are veracious, it is possible for society to go on. We generally know whom we can trust, in special circumstances, and whom not; the theory of evidence explores all the weaknesses of human testimony and makes allowances thereupon.

The early attempts of parents to inculcate truth are a curious study. They mainly take the form of impressing self-crimination in case of committing faults. Authority resents being baulked; and it is an object to induce an offender, who is necessarily the best informed, and frequently the only, witness of his or her offence, to make full confession at once. This is done partly by threats of double severity, in case of detected falsehood, and partly by the promise of leniency if the fault is confessed. It seems to me that it would be better to imitate the criminal procedure of the law, and not to ask young offenders to criminate themselves, but simply to make their statement, and use it against them if need be; trusting to other sources of evidence. Following the approved procedure, we might require one child to give evidence against another, with the same limitations as in the criminal law; and might regard false evidence as a heinous offence; much more heinous, indeed, than the ordinary telling of a lie.

I advert to this particular instance, with a view of making a general observation regarding the proper place of Truth among the cardinal virtues. A virtue that has so many exceptions, that is so often qualified by circumstances, cannot well be accounted independent and self-supporting. Indeed, in only one situation, is falsehood a crime in the eye of the law; in all other cases, its culpability is moral, and its punishment awarded by public opinion. It is often an adjunct of legal offences; but the substantive offence is something apart. An accountant falsifies his books: his crime is not the falsehood, but the defrauding of his employers. A false accusation is libellous, because of the slander, not because of the falsehood; a false compliment is not illegal.

I think, therefore, that in dealing with the vice of lying,

more should be made of the actual mischief than of the form of untruth. Lying is bad, because it is the tool of dishonesty in every shape. A dealer that palms off upon me a bad article for a good, tells a lie, no doubt; but I prefer to describe him as a cheat. A servant that neglects his work, and tells a lie, or suggests one, to cover the neglect, is dishonest and base. Truth, as we see, has many exceptions; honesty has none. Some one misrepresents me, in order that I may lose favour with those that I depend upon; a "lie" is not strong enough to express the viciousness of the act, nor precise enough to show its criminality.

A remark in the direction now indicated is made by John Grote *(Moral Ideals*, p. 220): "The proper moral aspect of truthfulness seems to me to be that it is one case of the very wide duty of *faithfulness to trust*, which alone renders possible the correspondent virtue of trustfulness." "Truthfulness comes more simply thus, as a branch or case of faithfulness, than as a branch or case of 'openness,' which latter, as a virtue, is a matter of difficult consideration."

The proper and characteristic region of truth, where it has an independent and unqualified obligation, is the investigation of nature, with a view to the extension of our knowledge and resources. All looseness of observation, and of statement of facts, all hasty generalisations, and fallacious inferences, are sins against this form of truth.

A brief definition of the social virtues—Justice and Benevolence—concludes the author's review of the contents of the Moral Law. The next chapter is more exclusively psychological, being the discussion of Altruism, or the possibility of self-sacrifice. I concur with the general drift of the reasoning, so far as implying that altruism has not a selfish origin. But, when the author tries to make out, that sympathy follows necessarily our power of representing to ourselves the feelings of others, I am bound to differ from him, having for a long time held the same view, and at last abandoned it. I mean, however, to confine my remarks to his mode of dealing with the frequent intrusion of Malevolent pleasure into our representation of the pains of others. He takes the bull by the horns, and boldly affirms that the pleasure of Malevolence is, with some exceptions, not a real fact, but an incidental accompaniment of some other facts. Here I am compelled to join issue with him, and to pronounce his review of the particulars one-sided and incomplete. Dr. Chalmers before him wrote a dissertation entitled —"The Inherent Misery of the Vicious Affections," and maintained that malevolence generally, while being inci-

dentally pleasurable, is intrinsically painful. I contend for the very opposite; and hold that malevolence is intrinsically one of our intensest pleasures, and only extrinsically and incidentally painful. I believe, moreover, that to get at the exact truth on this question is of vital importance in all sociological as well as ethical reasonings.

Mr. Stephen is too well versed in human nature, to be ignorant of the voluptuous pleasure in cruelty. But, while probably admitting it as a morbid extreme, he endeavours to explain away the more common cases of apparent delight in suffering. The child's pleasure in spinning a cockchafer is no greater, he contends, than in spinning a top. A savage throws down a crying baby, not from delight in its misery, but from torpid sympathy (this may be admitted). Much of cruelty is due to intellectual torpor; or I should rather say it is due to the natural delight in suffering, which sympathy would neutralise. Then, of course, when we have enemies to combat, "we rejoice in their sufferings as the mark of their defeat. A generous mind conquers an enemy, with the least expenditure of suffering." To all this I might urge the previous question, namely, that but for our malevolent dispositions, enmities and fighting would not have been the rule in the past history of the species. Mr. Stephen is somewhat staggered by the existence of personal dislikes, or unreasoning antipathy; and endeavours to make this out as a case of misplaced sympathies. "The hatred which is generated is always a more or less painful emotion"; notwithstanding which, it is freely indulged. That our developed sympathies have, in many ways, restrained the pure malevolent passion, is freely admitted; but why the necessity of all this restraint?

It is not easy, in a short space, to present the most decisive instances of our undying malevolence, and at the same time, to meet the attempts that may readily be made to explain away their force. Yet I will make the endeavour. We cannot do better than begin with one of Mr. Stephen's own cases:—"Nothing, of course, is more common than to find men take pleasure in humiliating and mortifying their neighbours," and the first example is—"The critic rejoices in tormenting a sensitive poet"; of course, not all critics, but a sufficient number to enable the fact to be stated generally. Now, after going over all Mr. Stephen's palliatives, I find nothing in them that can set aside the inference from this fact. There is not the intellectual defect of being unable to conceive the pain inflicted; there is not necessarily rivalry of interest, or injury to be avenged; there need not

be even personal antipathy or dislike. No doubt, the presence of any of these causes would increase the pleasure; yet it is there, independently of them all. Well, then, let us interpret the situation. An intellectual man, in a civilised community, after ages of endeavour to improve our human sympathies, finds positive pleasure, of considerable amount, in inflicting the keenest anguish upon another intellectual man, with whom he has no quarrel whatever; his pleasure being great, because he knows that the sufferer feels acutely. And so frequent is this occurrence, that it is a type, and not simply a solitary case. The interpretation is not yet complete. The critic addresses thousands of readers, whose pleasures he is catering for; a large mass of those readers also enjoy the poet's torments, being equally free from any cause of quarrel with the victim. If this is not the pleasure of malevolence, pure and simple, I am at a loss to know what to call it. The poet may be a bad poet, but any mischief that his badness might cause is easily warded off. But he is not supposed to be bad; his only crime is to be sensitive.

I will take a few more instances promiscuously. The delight in teasing is one of the earliest manifestations of our nature. The boyish pleasures in cruelty of all sorts would offer a fund of examples; and, I cannot accept Mr. Stephen's theory of the spinning of the cockchafer. A large field is opened up in the reception accorded to apprentices at their first entry into a shop or trade. Something similar is reproduced in the well-known ceremonies on board a ship crossing the line. These usages, having once got a hold, are kept up for no other reason that I can see, than to reclaim a few small regions from the humanitarian influences of modern times, and to give full vent to the pleasures of tormenting fellow-beings.

I should like an analysis of "temper" from a disbeliever in pure malevolence. A burst of rage or angry passion is to me simply an eruption of the malevolent feeling, made use of by way of redressing some pain or affront that we are suffering from. If there were no intrinsic delight in giving pain, retaliation, like punishment, would be remedial and nothing more. But, as there are tyrants in the family, the school, the shop, the state, who are overjoyed when anyone commits a fault, so there is a satisfaction in being angry, far beyond the necessities of self-protection.

The delight of witnessing punishment is too manifest to be explained away. The assembling of thousands at executions is not yet forgotten. Now that they are private, the press-correspondent must still depict the demeanour of

the poor wretches as they mount the gallows, and resign themselves to the executioner's drop.

I wish farther to obtain an adequate explanation of the pleasure of laughter, comedy, and humour; all reference to the delight in malevolence being left out. The case is particularly strong, for this reason: the suffering inflicted upon the subjects is never deadly; it spares life and limb, and fortune; it must not even go the length of slander or defamation; it affects most usually the single point of pride or dignity; yet the pleasure of the infliction is a standing dish in life's feast. If to make a man appear humiliated can be so great a satisfaction, what would it be to see him stripped of all his possessions, tied to the stake and made to die an excruciating death? It is no answer to say, we should revolt at going such lengths; it is merely by artificial restraints, and by bringing other feelings into play, that we are made to stop where we do.

It would take us too far to go into the wide subject of sensational crimes worked up for our entertainment in romance, and depicted upon canvas. But for our lurking pleasure in the contemplation of suffering, these could not interest us; indeed, if our sympathy were alone affected by spectacles of misery and horror, a very large part of the history of the past would be unbearable. The much debated pleasures of tragedy are not so enigmatical, when allowance is made for the uncrucified malevolence of our nature.

John Grote *(Moral Ideals)* devotes a section to the passion of malevolence, likewise with the view of explaining it away. "Moralists, it appears, have been wrong, both on the one side in disputing the existence of pure ill-will, and on the other in considering it native in the same manner in which good-will is. Ill-will is perhaps a form of or mode of *vindictivolence, i.e.,* is connected with a feeling of ourselves as somehow wronged." I have quoted cases enough to dispose of such an explanation. True, we usually need a pretext for inflicting suffering; but we can often dispense even with this. Mr. Sidgwick seems to me to be nearer the mark, when he says, "Malevolent feelings are as natural and normal to man as the benevolent". But he would still confine their operation to resentment for harm done to us.

Mr. Stephen appeals to our delight in pungency of sensation, or love of excitement as such, in order to complete his explanation of malevolent feeling. But a neutral pungency has a certain efficacy as against dulness, without amounting

to fascination; whereas, we soon tire of a pungency mixed with pain, as in a shock of genuine fright.

It is as an obstacle to the vindication of Sympathy, or disinterested impulse, that Mr. Stephen makes so great an effort to explain away pure malevolence. The effort seems to me uncalled for; sympathy can hold its own, as a fact of our constitution, notwithstanding our delight in suffering. Indeed, the two facts, properly viewed, help to attest each other. Malevolence is overcome by sympathy; and sympathy never proves itself more efficacious than in checking malevolence. Mr. Stephen's vindication of sympathy as a fact not resolvable into any egotistic impulse, seems to me most just; but, as already stated, I think he leaves out a factor necessary to the explanation. He comes nearer the mark (at p. 257) when he dwells on the "corporate spirit," which he would make a product of sympathy. For my own part, I prefer to invert the terms, and to say that it is during our activity *with others*, that we contract the habit of corporate identification, out of which proceeds sympathy.

Before quitting the discussion of malevolence, I must note its bearings on Ethics. I consider that some of Mr. Stephen's analytic difficulties can be smoothed down by its mediation. For example, he thinks that Psychology has failed to give an account of the powerful sentiment of Patriotism. In my opinion, whatever strength belongs to the sentiment may be adequately explained, if, in addition to the social feelings that bind us to our co-patriots, we take in national vanity, and the hatred of rival powers. In the total absence of these last two feelings, I doubt if patriotism is ever very strong; the only circumstance that could give it intensity would be something that increased to an exceptional amount the social feeling, as unusual harmony of sentiment and closeness of sympathy in the general body of citizens.

A much more important application, and one that especially concerns the Evolution-theory of Ethics, is the bearing of malevolence upon the sentiment of power and authority. The delight in power would be considerable, apart from malevolence; but this feeling gives two very marked contributions to its intensity. First, power gratifies malevolence directly; giving us either the fact or the idea of making others suffer. Next, it exempts us *pro tanto* from the malevolence of others; a very influential consideration that weighs with the most generous minds. Now, there can be little doubt that the legitimate compression of men's wills, for general protection, is almost always exceeded by the pure

love of power (even omitting plunder). The only cases where power is not excessive are those where the people are unusually recalcitrant; this is in some degree true of the English, who, in certain instances, would much resent being over-governed. The important practical inference is that power must always be made to justify itself. The tendency of the evolution-view of society is to make out every institution to be good for its time; a great and mischievous error. Allowing for the unavoidable congruity between beliefs or practices and the wants of the people at the time, the possibilities of error from misjudgment, on the one hand, and from the bias of over-government (or at times under-government), on the other, are so great that the mere fact of the existence of any institution never dispenses with the scrutiny of its actual workings.

Mr. Stephen's discussion of the Rule of Conduct, as both prudential and sympathetic, is very ably and satisfactorily conducted; and, although a much shorter demonstration would satisfy me, I perused his reasonings with the greatest pleasure. He very properly tries to go as far as he can in making sympathy its own reward; but makes the due reservations that the case requires.

The chapter entitled "Merit" contains a section on Free-will, which I consider part of the Metaphysic of Ethics, and unnecessary in a practical treatise. Yet the handling is admirable; it covers the hypothesis of chance-motives, and also the difficulty of making us responsible for what we cannot help. That men are amenable to motives is a sufficient reason for plying them with motives. It is a question not of metaphysics, but of humanity, whether we should trust solely to punishment for keeping people right, or try in addition to circumvent them by an education that renders them indisposed to crime.

The chapter on Conscience is a purely psychological discussion; it is in fact one of the two old standing questions of ethics. The author remarks—"To explain fully what is meant by conscience, or by any other mode of feeling, would require a complete psychology, such as is not at present in existence." He does not, however, make the most of his own psychology, but gives us a dissertation, very interesting in itself, and conducted with his usual ability, on the Sense of Shame. It seems as if he had prepared a criticism on Darwin's theory of Blushing, and inserted it in the present chapter. The feeling of Shame is a part of the more general and comprehensive feeling of Social Disapprobation, which Mr. Stephen was as competent to deal with as anybody

I know. I turn back to what he says in a previous chapter, namely, "that as every man is born and brought up as a member of this vast organisation, his character is throughout moulded and determined by its peculiarities". The pressure of society is not confined to making us blush when we run counter to its dictates; it has many more powerful motives at its disposal. And Mr. Stephen acknowledges as much before he has done with Conscience, when he calls it a corporate sentiment, often very hard to distinguish from a moral sentiment. There is a low conscience, made of fear, and a higher kind containing elements of good-will to our fellows and our society. Mr. Stephen dwells much upon the Family, as the true school of morality; and presents a type of family life, which is one of the few things in the volume that I should be disposed to consider exaggerated. If, in order to our being moral, we had to be subjected to such family influences as Mr. Stephen depicts, few of us, I think, would have much morality to show. Indeed, seeing that only a small proportion of men or women are competent to the parental requirements, even in the most advanced community, the defects of the family training have to be made up by the society outside the family.

The ninth chapter contains the objections to Happiness as the criterion of virtue, and states the superior advantages of adopting Health as the criterion. I confess that I think his discussion of the value of health, as a means of happiness to the individual, is not equal to the strain that it has to bear. The remarks about securing happiness through health contain much truth, but stand greatly in need of qualifications. The shortness and the inadequacy of the handling confirm the remark, already made, that Ethics needs a Hedonic, as well as a Sociological *prolegomenon*. Hedonics is not a very advanced science; yet there are a few points which could be stated with some degree of precision; and one of these is the relationship of Happiness to Health.

Although I cannot help admitting the force of Mr. Sidgwick's criticisms on the displacement of Utility as a criterion, I am more tolerant of the attempts of the Evolutionists to help out the Happiness-test with any others that can supply its defects. Instead of simply wishing anyone Happiness, I recognise a superior force in the expression—"Health and Happiness to you". So, as ethical reasoners, we may very well couple the two.

The chapter on Morality and Happiness deserves every commendation. The question whether, and how far, virtue

brings happiness, is subjected to a sifting examination, than which nothing could be more thorough. The negative conclusion is inevitable, in the hands of such an uncompromising reasoner; while everything is done that can be fairly done to palliate the unwelcome conclusion. Mr. Sidgwick had previously gone over the ground, and had arrived at the same general result; but Mr. Stephen has taken especial pains to soften the fall from the conventional optimistic view. I do not wish to open up the discussion; but there is one remark that helps to explain, to my mind, the *nonchalance* of mankind generally on the disconnexion between virtue and happiness. So precarious is human life altogether, so much at the mercy of a thousand accidents is our happiness, that we look upon an act of uncompensated sacrifice as merely one of the numerous evil contingencies of our lot. If, apart from the occcasional call to sacrifice ourselves for our country, or our family, we had each an assured existence of tolerable comfort for seventy years, the hardship of the demand would stand forth with peculiar prominence; struggles would be made to evade it, and to score the usual term of a happy life. But while a father, in sending one of his sons to die on a foreign battle-field, has to count upon fatalities of a different kind for the rest, unconnected with the safety of his country, he puts the whole into one sum, as part and parcel of the lottery of life.

As I have referred at such length to Mr. Stephen's recent work, I will add that if I had his practised faculty for the criticism of style, nothing would give me greater pleasure than to express my admiration for the literary art shown in his volume. The epithets that occur to me as most applicable to the author, are "a logician, and a logical rhetorician". His logic has rarely a flaw, and his rhetoric, instead of shining as pure ornament, is the devoted slave of the logic. How often does he dispose of a subtlety, by a single allusion often from the most familiar sources! What could be better than his remark on the very popular maxim, that, in order to be happy, we should not aim at happiness:—"We have as it were to keep a secret from ourselves, and to hit the mark by pretending to look in the opposite direction."

The general plan of the work is, no doubt, suited to the author's own conceptions of the scope of Ethics; and it is useless wishing it to have been otherwise. If we desire a different course to be taken, we must commit the execution to a different hand. My own inclination would be for

prompting some one to mark a broad line between moral legislation and moral advice; instead of regarding the two as continuous and homogeneous. It is very well to say, the law makes a step in advance when it rises from "Kill not" to "Hate not"; but the change is a radical change of ground, where motives have to be invoked of an entirely novel kind. The moral disposition passes beyond human law, whose sphere is limited to externals. There is an important advance upon "Kill not," still within the legal sphere, when we add,—Do not maim or injure in any way, do not defame or slander, do not teaze or annoy; and although a comprehensive sympathy would include all that, the law does not enjoin the sympathy, but punishes the forbidden acts.

A. Bain.

IV.—A CRITICISM OF THE CRITICAL PHILOSOPHY.

I.

It will be generally admitted that the amount of attention bestowed on the philosophy of Kant is one of the most noteworthy phenomena in recent English philosophical literature. Besides the remarkable monument to Kant's influence recently offered by Mr. Max Müller in the form of a translation, we have had within the last five years what the latest worker in this field[1] has described as "a penetrating exposition of Kant's central doctrine by Dr. Hutchison Stirling: an eloquent and suggestive account of the first *Kritik* by Professor Caird: a well reasoned *resumé* of the theoretical and moral philosophy by Professor Adamson: and an able and elaborate review of current English opinion on Kant by Professor Watson". It is evident, again, that the main aim of most of this work[2] is not merely to throw light on an interesting department of the history of thought, but rather to effect a radical change in current English philosophy: the writers desire that our philosophy should "return to Kant" (Adamson), should obtain from the study of Kant a "philosophical rejuvenescence" (Max Müller), should—in Mr. Wallace's briefer, but yet more solemn phrase—"*learn Kant*". They plainly consider that the only obstacle to this result is the want of due intelligence on the part of the students of philosophy who remain obstinately unkantised: that, as Mr. Watson says, "Kant has opened up a new way of ideas, which should win general assent the moment it is seen to be what it really is". Under these circumstances it seems desirable that some of the yet unconvinced persons should endeavour to co-operate with the efforts that are thus liberally being made to instruct them, by explaining clearly, and as completely as is consistent with due brevity, the reasons why they remain unconvinced. And, in default of more competent or more representative writers, I have determined, after considerable hesitation, to undertake this task.

One main reason for my hesitation may perhaps be here

[1] Prof. Wallace, in the preface to his recent work on Kant in Blackwood's *Philosophical Classics*.

[2] I must except the "penetrating exposition" of Dr. Stirling; who considers Kant's method "a laborious, baseless, inapplicable, futile superfetation".

explained, in order that the point of view from which this article is written may be better understood. It is, briefly, that I cannot regard the criticism of Kant on which I am about to enter as anything but a *pis aller:* it is not what I should have wished to write on the subject to which it relates, but the only thing open to me to write—according to the view that I have just given of the occasion for writing something. I should have preferred, if I dealt with Kant at all, to treat his work in a more sympathetic and more historical manner; to explain carefully how his doctrines are related to those of his continental[1] predecessors, and how even when they appear to me most manifestly invalid, we may yet understand the process by which an acute and truth-loving mind was led to hold them, at a certain stage in the development of metaphysical speculation in Germany. I feel it to be somewhat of an anachronism, and not altogether in good taste, to bring to bear upon the weak points—as I regard them—of the Kantian system, the minute, unreserved and unqualified criticism which a system or method of philosophy challenges and requires when it is first offered to the acceptance of students. I should have much preferred to apply this manner of criticism not to the doctrine of Kant himself, but to the doctrine of these contemporaries of mine who are inviting us to learn the lesson of Kant and obtain thereby a new philosophical birth. But this latter course, I conceive, is not really open to me; because no attempt has yet been made to put this latter doctrine before us in a form in which it would be worth while to apply serious criticism to it. In fact I am hardly warranted in making the assumption that there is such a common doctrine; and that all or even most of the writers above referred to have really learned from Kant the same lesson and, in their own philosophical speculations, are pursuing the same "way of ideas" under his guidance. I think, however, that I may with approximate accuracy speak of Professors Adamson, Caird, Wallace and Watson as belonging to the same school—without, of course, meaning to saddle any one of them with responsibility for the precise statements made by any of the others. And I might perhaps be able to give a general account of the method and conclusions of this school which would not be found altogether misleading and erroneous. But as no one

[1] I say 'continental' because, as Kant shows no sign of having really understood Hume's position—whatever fruitful suggestions he may have derived from him—and every sign of having misunderstood Berkeley's, I do not consider it particularly instructive to dwell upon his historical relation to his English predecessors.

of them has yet expounded their view of the universe in a direct and systematic manner, it would be futile to attempt to criticise it in the only way in which philosophy appears to me worth criticising: that is by testing as rigorously as possible the clearness and legitimacy of its premisses, the cogency of its procedure, and the consistency of its conclusions. And it would, in my opinion, be especially futile to attempt this under the guise of a discussion of Kant's doctrine; since it is quite clear to me that the English Neo-kantians—if I may venture so to call them—differ from Kant in points that I regard as fundamental. Indeed, when I have been reading the criticisms with which Prof. Caird and Prof. Watson intersperse their exposition of Kantism, I have often longed to call up the philosopher of Königsberg himself, and to ask whether if the parts of his system which these disciples assail were abandoned, the remainder would, in his opinion, be of much value—whether the edifice of his transcendental philosophy would not be ruined from top to bottom, and need to be rebuilt from its foundations, and refashioned into something very unlike his own construction. This, at any rate, is my view of the situation: the English Neo-kantians appear to me to be living with every appearance of comfort in a mansion of thought which never was very firmly based, but from which they have ostentatiously removed the imperfect foundation that it originally had. And this being so, a systematic reconstruction which I could not presume to undertake appears to me an indispensable preliminary before any adequate criticism can be attempted of the doctrine that they have learnt from their master. If therefore I criticise anything I must criticise Kant: and so far as this criticism may fall on points that no one will defend, I must throw the responsibility for its irrelevance on my Neo-kantian contemporaries. It is Kant's philosophy that they are professedly commending to our attention, in the eloquently suggestive, well reasoned, and ably elaborated treatises before mentioned: it is Kant's "way of ideas" which, we are told, ought to win our assent as soon as it is understood: and if, as I think, it is some philosophy quite different from Kant's that they really have in their minds, it is surely high time that this other philosophy should be placed on an independent basis and duly reasoned out from its own proper premisses.

I propose then to attempt a brief examination of the Critical Philosophy, in which I shall try to expose what seem to me the radical defects of its procedure; taking it as offered for the acceptance of Englishmen, at the time at

which I write. I have called the method and system which I propose to examine Critical rather than Kantian, because this is the style which the English Neo-kantians seem to prefer, especially when they are emphasising the claims of their master to a more than mere historic interest. At the same time the term involves a serious ambiguity; which, however, we can hardly expect our Neo-kantians to take pains to dispel, since they derive from it a not unimportant rhetorical advantage—the same kind of advantage that accrues to "liberal" politicians from the similarly ambiguous denotation of their party. For the term "critical"—especially if we spell it, as these writers usually do, with a small *c*—does not lose its common meaning for the ordinary reader by becoming the proper name of Kant's doctrine: though it denotes the method of a particular school, it still connotes a faculty and a habit of mind which all schools would allow to be valuable and important to a metaphysician—the faculty of detecting flaws and blemishes in any intellectual product to which it is applied, and the habit of scrutinising carefully the processes and results of thought, with a view to such detection. These qualities do not necessarily accompany eminent inventive or constructive genius in any department; indeed, they are commonly thought to be somewhat alien to it. We expect a "critical" philosopher to be keenly sensitive to any inexactness or uncertainty in his premisses, any want of cogency in his inferences, any inconsistency in his conclusions; but we do not expect him to be necessarily original, penetrating, or profound. Now it so happens that, while no one would deny to Kant originality and penetration, the excellences which the term "critical" thus surreptitiously attributes to him are, in my opinion, those to which his claims are most disputable: and in fact, it will be the main aim of this paper to show that the system that has appropriated the term Critical as its proper appellative, does not really deserve the title in the wider sense which I take to be still current and legitimate. A critical philosophy is surely nothing if not self-critical: and Kant, though a penetrating critic of other philosophers (when he understands them) seems to me very deficient in the faculty or habit of self-criticism. This deficiency I find manifested in two different manners: first, Kant does not seem to have ever been clearly conscious of the "presuppositions" involved in his Critical procedure, still less to have compared them impartially with the presuppositions of his dogmatic predecessors; and secondly, under the fatal temptations of symmetrical system-making to which his fertility in subtle

distinctions and analogies rendered him peculiarly prone, he seems to intermix with his most profound and plausible reasonings fallacies and inconsistencies of a very palpable kind. Now the general objections that I entertain to the procedure of Criticism are so fundamental that, if valid, they amply justify me in rejecting it; but since I cannot suppose that they have not been fully considered by the advocates of the Kantian system, I should not feel the confidence that I still do feel in their validity, if they were not supported by the cumulative force of narrower objections to particular arguments and details of the system. To exhibit fully this cumulative force would require a book rather than an article; but I must try at least to give some representative examples of these more special objections besides stating the more general ones: and therefore must criticise Criticism in some detail.

At this point, however, the ambiguity just spoken of recurs in another form: since when we speak of criticising Kantian Criticism, we may either (1) use the term "criticise" in a wide and general sense, or (2) we may use it in the special signification which Kant has fixed on it: that is, we may propose to test the validity of the Kantian system by applying to it its own precise procedure, and demanding that the transcendental knowledge it offers shall be demonstrated on general grounds to be possible, before we consent to examine its details. Now I certainly think that this latter method is one which, on Kant's own principles, we have a *primâ facie* right to adopt: that if it was legitimate and opportune for him to ask "How is (dogmatic) Metaphysics possible," it must be equally legitimate and opportune for us to ask, "How is Critical Philosophy possible". For the occasion and justification of Kant's question is stated by himself to consist in the lack of steady progress in the *soi-disant* science of metaphysics: and the most convinced adherent of the Kantian system must admit that the Critical Philosophy has not, as Kant hoped, succeeded in removing the reproach. So far as it was true[1] in 1783 that "while every other science is incessantly advancing, in this . . . we are continually turning round on the same spot, without getting a step farther,"[2] it must, I think be allowed that

[1] I do not mean to say that it *was* true: on the contrary, I think that the statement is far too violent and sweeping. But it had a certain element of truth: and my point is that to whatever extent it was true then, it would be true now to nearly the same extent.

[2] *Prolegomena*, Introduction.

the contrast is hardly less marked in 1883: if it was then found "impossible to produce unanimity among those who are engaged in the same work, as to the manner in which their common object should be attained," there is, I fear, no clear evidence that it has become more possible now. And therefore if it was competent to Kant to "suspend all metaphysicians solemnly from their occupations" till they have shown the possibility of metaphysical knowledge, it must surely be competent for us Englishmen to impose a similar inhibition on the Critical philosophers, until the "credentials" of Criticism have been tested and found satisfactory.

Here, however, I suggest this question chiefly in the hope that the consideration of it may cause our Neo-kantians to abate somewhat of that air of superiority which they are in the habit of adopting towards all whom—with a great extension of the term as used by Kant—they are pleased to call Dogmatists: all, that is, who seek knowledge on the great questions of ontology without first asking "How is such knowledge possible?" Unless the Critical Philosopher can first explain how *his* knowledge is possible, he would seem to be only a dogmatist of a new kind: and I do not perceive that he ever does premise such an explanation. He may perhaps reply that I might equally well ask him to prove the possibility of this explanation, and so on *ad infinitum:* but this answer, if valid, would only show more cogently the unreasonableness of his original attack on his Dogmatists. However, I do not now wish to press this *argumentum ad hominem:* since the criticism that I propose to apply to the Kantian system will only be of the common and humble kind: I shall not demand to be shown how Critical Philosophy is possible, but merely that it is proved.

In order to proceed systematically, I shall begin by examining the account that Kant gives of the premisses or point of departure of his system, which appears to me open to very serious criticisms. But before I state them, it will be well to notice at the outset certain fundamental objections which different classes of instructed readers are likely to feel to the kind of criticisms that I am about to make. It will be said by some that Philosophy, properly viewed, has *no* premisses, in the sense in which I am assuming Kant's system to have them; that is, it has no basis of knowledge or irrefragable belief, independent of its own work, and on which this stands or upon which it logically depends; that though, in making its way into our minds, it must begin from some cognition that is not yet philosophical,

this point of departure must not be mistaken for its foundation, since Philosophy is in reality self-centered and has its principle of highest certainty within itself; so that, when fully comprehended, it really gives support to the cognitions from which, in the process of being learnt, it has to start, and does not need to receive support from them. Again, it will be said by others that Philosophy, properly viewed, has no *particular* premisses; that what it starts with is the whole aggregate of what is taken for knowledge—or reasoned and systematic thought, so far as this is a wider term than knowledge—by the thoughtful part of society to which the philosophising individual belongs; that his function as a philosopher is to bring this aggregate into clearer coherence by impartial reflection on it, any conclusions he may reach as to the superior validity of particular portions of the aggregate being arrived at in the course of the reflection itself. Now I should quite allow the force of one or other of these answers if I were professing to criticise certain other kinds of philosophy in the manner in which I am about to criticise Kant—*e.g.*, I should allow the force of the former answer if I were criticising an avowed disciple of Hegel, and the force of the latter if I were criticising an avowed disciple of Reid. But I cannot admit the applicability of either on behalf of a philosophic method which, like Kant's, professedly seeks and obtains knowledge as to the nature of our faculty of knowing in order to establish the limits of its legitimate exercise: since no one can maintain that cognitions relating to our faculties can have—even ultimately and when the philosophy is complete—logical priority over cognitions relating to the manifestations of these faculties. The knowledge that we have faculties of knowledge so and so constituted must always, I conceive, remain an inference from the knowledge that we have such and such knowledge. Hence in order to attain any valid conclusions as to the "faculty of reason in general" which Kant, in the preface to his first *Kritik*, states to be the subject of his inquiry, he must have, as the premisses from which he starts, some valid cognitions attained by the legitimate exercise of this faculty; and any defect of certainty in these presupposed cognitions must attach also to his Critical conclusions. Indeed, as we have already seen, the Critical procedure assumes this presupposed knowledge to be not only as trustworthy as we can get, but so much more trustworthy than certain other widely accepted systems of beliefs,—*i.e.*, Rational Psychology, Ontology and Theology—that the ascertainment of the conditions of the

former will afford us cogent reasons for denying the possibility of the latter.

We have therefore to ask (1) What are the (apparent) cognitions of his own and other minds which Kant assumes to be really valid knowledge? and (2) How are we justified in assuming this, at the outset of the Critical procedure? The answer that Kant gives to the former of these questions in the passage in which he answers it most explicitly,[1] appears quite clear and definite: Pure Mathematics and Pure or Rational Physics constitute the knowledge assumed to be real. And I think that this was undoubtedly *one* of Kant's points of departure, and that he had perfect confidence in its legitimacy; hence, though I shall presently show that it was not his *only* point of departure, it will be simpler to consider it by itself in the first instance. How then does Kant justify this very important preliminary assumption of his philosophy? I know no passage in which he answers this question very completely; and I am inclined to infer from this that he has never fully realised either the importance or the difficulty of the question:—the more because our Neo-kantians, for the most part, hardly appear to realise them at all.[2] The difficulty, in my view, arises from the attitude of complete scepticism which Kant asks us to take up with regard to dogmatic metaphysics, with the attitude of unquestioning reliance which he adopts towards mathematics. What broad distinction is there

[1] *Prolegomena zu jeder künftigen Metaphysik* §. 5. "Indem wir . . . *voraussetzen*, dass solche Erkenntnisse aus reiner Vernunft wirklich sind, so können wir uns nur auf zwei Wissenschaften der theoretischen Erkenntniss . . . . berufen, nämlich reine Mathematik und reine Naturwissenschaft.

[2] I ought, perhaps, to make an exception in favour of Mr. Watson, who does devote some pages to this question in the first chapter of his book. But after a careful perusal of the pages, I find it difficult to grasp Mr. Watson's view of the subject. On the one hand, he says, in the most unqualified way (pp. 5. 6), that "the special facts and laws of the mathematical and physical sciences" are Kant's actual premisses "not propositions which he seeks to prove but data which he assumes;" of which "the particular philosophical theory we adopt will in no way alter the nature *or validity*:" he even opines (p. 16) that "it would have appeared to Kant mere folly to prove the truth of mathematical and physical propositions". On the other hand he says (p. 10) that "an examination into the nature of knowledge is *forced on* us as a means of *justifying, if that be possible*, the universal and necessary principles which are imbedded . . . in the special science:" and also (p. 1) that "the request . . . to prove the supposed absoluteness, objectivity or necessity of the particular facts and laws which no doubt exist in our consciousness . . . is perfectly reasonable". I can hardly suppose Mr. Watson to mean that I am justified in assuming, apart from Criticism, that the special laws of mathematics and physics are

between the intellectual process by which the apparently self-evident universals of the latter science are known, and that by which the human mind is led to affirm the apparently self-evident universals of the former? The manner in which Kant sometimes (*e.g.*, *Prolegg.* § 5) tries to exhibit the distinction seems to me palpably inadequate. He says that "pure Mathematics and pure Physics can exhibit their objects to us in intuition, and hence, supposing there should occur in them a cognition *a priori*, can show us the truth or harmony of the cognition with the object *in concreto*, that is, its reality, from which we could then proceed analytically to the ground of its possibility". But this does not clearly affirm more than that the mathematician or physicist can show one or more particular concrete examples of any universal proposition that he lays down: and no one knows better than Kant that no accumulation of such particular examples can establish the validity of the universal proposition, *quâ* universal. In the case, however, of Mathematics Kant means a good deal more than this: he means that mathematics can show us its object in a "pure *a priori* intuition,"—can, as he otherwise says, "construct" it. This meaning is most clearly expressed in a passage in the *Kritik* ('Methoden-lehre' I. Haupst. 1. Abschn.) where the essential difference between mathematical and philosophical cognition is developed at some length.

"Philosophical cognition," he says, "is the rational cognition obtained from concepts, mathematical that obtained from the construction of concepts. By constructing a concept I mean representing *a priori* the intuition corresponding to it. For the construction of a concept, therefore, a non-empirical intuition is required which as an intuition is a single object, but which nevertheless as the construction of a concept or general notion must express something that is generally valid for all possible intuitions which fall under the same concept. Thus I construct a triangle by representing the object corresponding to that concept either by mere imagination, in pure intuition, or after this on paper also in empirical intuition, in both cases however *a priori*." [1]

Now I will grant that the distinction thus laid down

true for me individually, but not that they are true for mankind generally; and that that is Kant's assumption: since nothing can be more manifest than that, so far as Kant assumes anything with regard to the laws in question, he assumes their "objectivity" and "universal validity". Cf. *Prolegg.* § 5, §§ 14—20. And again I can hardly suppose Mr. Watson to mean that I am justified in assuming the truth of special laws and yet not similarly justified in assuming the truth of the more general principles on which these laws depend. Hence, I am unable to collect from his various statements any consistent view that has even a *primâ facie* plausibility.

[1] Hartenstein's ed., p. 478; Rosenkranz' ed. p. 552, 3.

holds in the case of Geometry, from which Kant's illustration is drawn: I will grant that geometrical reasoning is distinguished from philosophical by being referred to an object which as concrete and individual can be perceived and not merely thought. But Kant's distinction is drawn in favour not of Geometry only but of Pure Mathematics generally: and it is certainly not obvious that algebraic or even arithmetical reasoning involves any similar reference to an individual concrete object. The reader will therefore look with some curiosity to see how these branches of Mathematics can be shewn to proceed "aus der Construction der Begriffe:" and I cannot but think that he will be rather surprised when he comes upon the following explanation.

"In Mathematics, however, we construct not only quantities *(quanta)* as in Geometry, but also mere quantity *(quantitas)* as in Algebra, where we abstract completely from the properties of the object that has to be thought according to this quantitative conception. We accordingly adopt a certain notation for all construction of quantities generally—such as addition, subtraction, extraction of roots, &c.—and having also characterised the general concept of quantities according to their different relations, we represent in intuition every operation by which quantity is produced and modified, according to certain general rules. Thus when one quantity is to be divided by another, we place the signs of both together according to the form denoting division, &c.; and thus Algebra arrives by means of a symbolical construction, no less than Geometry by means of an ostensive or geometrical construction of the objects themselves, at results which our discursive cognitions by means of mere conceptions could never have attained."

This passage appeared to me to show conclusively the careless and imperfect manner in which Kant has thought out this part of his doctrine. He has begun by giving us, as the *differentia* of Mathematics, that it "constructs" its concepts, defining "construction" to be the representation *a priori* of a concrete individual object corresponding to its concept: and then proceeds to give, as a particular case of this construction, the "symbolic construction" of Algebra, as explained in the above passage. But it is plain that in this "symbolic construction" there are no individual concrete objects corresponding to the concepts of quantity employed in the algebraical reasoning, except the symbols that we write down on paper, and that these are neither more nor less individual and concrete than the symbols of ordinary language used in philosophic reasoning; so that the distinction sought to be established between mathematical and philosophical cognition breaks down altogether. Yet Kant is so satisfied with this explanation that he substantially repeats it a few pages later in a passage "On Demonstration," in which he tells us that the procedure of Algebra in dealing

with equations is "a construction, not geometrical but by characters (charakteristisch) in which, by means of signs, we exhibit in intuition the concepts especially of the relation of quantity . . . and secure all our inferences against error by placing each of them visibly before the reasoner's eyes: whereas philosophical cognition must dispense with this advantage as it must always contemplate the universal *in abstracto*, &c."[1]

Surely it is hardly necessary to point out that the algebraist can no more bring his reasonings "vor Augen" by the simple expedient of writing down his x's and y's, his + and – &c., than the philosopher can by similarly writing down his philosophical terms with verbs, conjunctions, &c., appertaining. Surely it is manifest that the universals of Algebra are just as much contemplated *in abstracto* as the universals of Philosophy, the superiority of Algebra lying in greater definiteness of conception not in any "concrete" or "intuitive" presentation of what is conceived—and in short that Kant having established a plausible distinction between *Geometry* and Philosophy is forcing it on to the alien matter of *Algebra* with a violence that must be palpable to every one except himself.

So far as Arithmetic is concerned, there is another passage (*Prolegg.* § 10) in which Kant seems to offer a different account of the procedure of Mathematics in this department. He says that "Arithmetic accomplishes its concepts of number by successive addition of the units of time"; thus suggesting that it is the pure intuition of time by which the concepts of number are "constructed". Now it is true of course (1) that the process of counting one, two, three, . . . occupies time, each number being thought a moment later than the preceding ones; and (2) that some process of counting is necessary to the full realisation of the small numbers—which are the only ones that we ever do fully realise. But it does not therefore follow that the abstract units summed up in the notion of any number are units of time: indeed, it seems to me manifest that they are not, and that on the contrary when we fully realise the meaning of (say) "four," the four parts of this whole are necessarily conceived simultaneously and not successively—although, as I have said, a process of counting is required to attain this realisation. Time is no more involved in the notion of number, than it is in any other notion which is at once complex and definite: since for the full realisation of any such conception we

[1] Hartenstein, p. 499, Rosenkranz, p. 568.

require a process of synthesis in which we dwell on each part separately. And it may be observed that this view as to the relation of Arithmetic to Time seems to be rather doubtfully held by Kant: at least there is no suggestion of it in the discussion of Time in the Transcendental Æsthetic.

A similar hasty extension to Arithmetic of a view originally formed by a consideration of Geometry may be seen, I think, in Kant's famous distinction between "analytical" and "synthetical" propositions—or at least in the discussion in which he illustrates and defends this distinction. I do not deny that in a certain sense arithmetical equations are synthetical: that is, an act of synthesis is required to form the concept of each successive number in counting; and the validity of arithmetical reasoning depends upon the possibility of such syntheses. But this is not what Kant means in affirming that $7 + 5 = 12$ is not a merely analytical proposition; he means to deny that it can be obtained by inference from the definitions of numbers—or, in his own words, from "mere analysis of their concepts," granting their concepts to have been legitimately formed. Now it is doubtless true that the proposition $7 + 5 = 12$ cannot be obtained by mere analysis of the notions 7 and 5, or even of the whole series of numbers up to 7. But Kant would hardly deny that it may be obtained from the proposition $12 = 7 + 5$ by simple conversion: and it is easy to show that this latter proposition can be strictly inferred from propositions which Kant can hardly deny to be analytical. For, first, I do not see how he can deny that $12 = 11 + 1$ is an analytical proposition, since this is what the symbol 12 signifies, according to the rules of arithmetical notation: secondly, it must similarly be admitted of numbers from 10 downwards that $10 = 9 + 1$, $9 = 8 + 1$, &c., &c., are analytical; and, thirdly, since Kant says that "the whole > its part" is analytical, I hardly suppose that he would deny this of the closely connected quantitative axiom "the whole = the sum of its parts taken in any order". If so, the proposition $12 = 7 + 5$ may obviously be deduced from the above premisses.

In short Kant appears to me to fail altogether in making out the resemblance between Geometry and Arithmetic which he requires for the purposes of his argument, and therefore his distinction between the self-evidence of mathematical and the self-evidence of metaphysical premisses palpably breaks down.

Let us now consider how the case stands in respect of the non-mathematical universals of Physics: *e.g.*, the proposi-

tion that every event must have had a cause, or that matter is indestructible. Kant has no more doubt that the validity of these propositions may be unhesitatingly assumed prior to criticism, than he has in the case of the universals of Mathematics: "Pure Mathematics and pure Science of Nature would not have needed *for their own safety and certainty* any such deduction as we have made of both".[1] But the ground of this certainty is stated differently in the two cases, since the concepts used in the non-mathematical universals of Physics cannot be "constructed *à priori*": and therefore, while the universals of Mathematics are said to "rest on their own evidence," the non-mathematical universals of Physics have to "rest on experience and its thorough confirmation"[2] (durchgängige Bestätigung). Similarly in the second paragraph of the Preface to the first edition of the *Kritik*, Kant refers to the principles of Physics as "principles . . . the use of which is sufficiently guaranteed (hinreichend bewährt) by experience". But how can Kant consistently say that these universal propositions are sufficiently "confirmed" or "verified" by experience, when he at the same time maintains as a fundamental point in his argument that experience cannot really establish universal propositions? If experience cannot establish them, it must be obvious that it cannot adequately "confirm" or "verify" them *quâ* universal. Is it possible to adopt the answer to this question suggested by Mr. Watson? Can we suppose that Kant really means that the "safety and certainty" of the universals of Physics may be assumed not because experience can prove them—as it manifestly cannot—but because they are "undoubted," because everybody does assume them and experience does not contradict him? that, in Mr. Watson's words, it "would have appeared to Kant mere folly" and "a voluntary creation of self-tormenting difficulties," to "ask philosophy to prove what no one denies"?—that, in short, he relies not strictly on induction from experience, but on Common Sense uncontradicted by experience? But what is meant by saying that the principle of causality is undoubted? Grant—for the sake of argument, and in spite of the prevalent belief in free will—that it is undoubted by Common Sense, it cannot be said that its absolute universality within the limits of possible experience—which is its fundamentally important characteristic from the Critical point of view—is undoubted

[1] *Prolegomena*, § 40. The emphasis on the words italicised is Kant's own.

[2] *Prolegomena*, l.c.

by philosophy: and it is difficult to believe that Kant would have deliberately appealed to Common Sense as an authority on a question at issue among philosophers, when we recall his severe censure on the Scotch school for making such an appeal.[1]

But how impossible it is for Kant to appeal to Common Sense with any consistency, appears more manifestly when we ask what he means by the "experience" that verifies the universals of physical science; since there is at any rate no doubt that his view of it is fundamentally different from the common sense view of the plain man. Common Sense undoubtedly means by my experience of physical facts cognition of something that exists as cognised independently of my or any man's cognition: while it is, of course, a cardinal point in Kant's system that I do not know things as they are but only as they impress my own and other human minds. But if Common Sense is so completely thrown over as regards the extra-cognitional existence of the object of perception, its authority can hardly remain worth much as regards the strict universality of the principle of cause and effect. In fact the two cases seem *primâ facie* parallel; as in each case we have a proposition assumed in ordinary thought which reflection—to most people—shows to be not self-evident, and therefore to require some kind of proof. I am not now considering whether it is possible for Kant to *prove* one of these propositions and disprove the other; but whether it is legitimate to assume one on the authority of Common Sense while yet rejecting the other: and I submit that, whether the plain man's view of the matter is worth much or little, it must be clearly unphilosophical to play fast and loose with him as Mr. Watson is disposed to do.

To sum up: I maintain that the premisses of Criticism, so far as we have yet examined them, are illegitimately and inconsistently assumed. Grant that the universals of Mathematics are apparently self-evident: the same may be said of many of the discredited universals of Metaphysics; and Kant has failed to show any such fundamental difference in mathematical method, when compared with that of dog-

[1] *Prolegomena*, Introduction. "They therefore discovered a more convenient means of carrying the matter with a high hand without any insight, *viz.*, by appealing to the *common-sense of mankind* . . . as long as a morsel of insight remains, a man will certainly avoid this desperate resource. For if you look at it this is nothing but an appeal to the judgment of the multitude, at whose applause the philosopher blushes, while the popular wit triumphs and gives himself airs on the strength of it."

matic metaphysics, as would warrant us in relying absolutely on the former appearance of self-evidence, while altogether distrusting the latter. Grant that the currently accepted universals of Mathematics and Physics are in a sense "verified by experience"; still, strictly taken, this can mean no more than that they are in harmony with our experience, so far as it has yet gone; and, according to Kant himself, this cannot establish their strict universality. Grant, again, that an effective appeal may be made to Common Sense, in Mr. Watson's manner, against the "voluntary self-torture" of raising doubts as to the universal truth of mathematical axioms or the principle of causality, within the range of possible experience; still, such doubts have been raised by philosophic intellects, and Kant has himself told us what to think of the misguided persons who appeal to Common Sense against Philosophy; and even if he had not told us, his own divergence from Common Sense on the fundamental question of external perception would have disabled him from making such an appeal consistently.

But, as I before said, I do not regard the point of departure that we have so far been occupied in examining, as the only point of departure of Kant's system. I do not think that in his own view he *requires* to assume the certainty of mathematical and physical universals in order to establish his Critical doctrine. In fact the very passage in the *Prolegomena*, in which this assumption is made, suggests that it belongs to the "analytical method" employed in that treatise, which a previous passage has expressly distinguished from the synthetical method chiefly used in the *Kritik*. And it seems to me clear from many particular passages in the *Kritik*, as well as from the general drift of that treatise, that Kant, while he considers himself justified in assuming the certainty of mathematical and physical universals, considers also that Criticism is competent to establish them by a process of reasoning in which this assumption is not made. I pass, therefore, to examine the precise nature of this process.

As I understand Kant, this part of the Critical procedure consists (1) in obtaining by reflection on and analysis of ordinary experience of particular facts—as distinct from general premisses or conclusions of science—a knowledge of the complex nature and functioning of the mind that experiences, and thus of the precise manner in which our different faculties—sense, understanding, and imagination—necessarily co-operate in producing the composite result which we call experience: and (2) thence inferring certain

necessary characteristics of this experience, and correspondingly universal laws of its objects. Here, then, again, our first duty is to make clear to ourselves his conception of the fact to be analysed, as he takes it prior to analysis. As I have already said, it is fundamentally different from the Common Sense notion of experience—so far at least as experience of physical fact is concerned. An empirical cognition of physical fact, in Kant's view, whatever else it may be, is not the cognition of an object that exists as cognised independently of this cognition. His grounds for discarding this element of the Common Sense view I shall presently consider; meanwhile I wish to ask what Kant exactly does mean by saying that we have "experience of objects," since he does not mean that we know things as they are. His language on the subject is a little perplexing: as he tells us on the one hand (*Prolegg.*, § 5) that "experience is nothing but a continuous synthesis of perceptions": and on the other hand (*Prolegg.*, § 18) that "judgments of perception" are distinguished from judgments of experience by being merely subjectively valid. But how can a synthesis of what is merely subjective give us knowledge of objects? or rather what is the meaning of "object," if it is somewhat that results from a synthesis of merely subjective elements? Kant's answer to this question appears to me confused and inconsistent: it is given as follows in the most explicit passage that I can find (*Prolegg.*, § 18):—

"All our judgments are at first mere judgments of perception; they are valid merely for us (for our subject), and it is not till afterwards that we give them a new reference, namely, to an object, and insist that they[1] are to be valid for ourselves always and for everybody else: for if a judgment agrees with an object all judgments concerning the same object must also agree among themselves, and thus the objective validity of the judgment of experience signifies nothing else than its necessarily universal validity. But also conversely, when we find reason to attribute necessarily universal validity to a judgment, we must also consider it objective, *i.e.*, as expressing a property of the object; for there would be no reason why the judgments of others should necessarily agree with mine, if it were not the unity of the object to which they relate, and agreeing with which they must necessarily also agree among themselves."

Now to the first part of this passage I make no objection,

[1] Kant's words are . . . "nur hintennach geben wir ihnen eine neue Beziehung . . . und wollen dass es auch für uns jederzeit und ebenso für Jedermann gültig sein solle". The only way of making the sentence grammatical is to refer the "es" to "Object": but as in all the rest of the passage it is always to "Urtheile" that "Gültigkeit" is attributed, I have preferred to regard the "es . . . solle" as an accidental lapse from the plural ("Urtheile") to the singular. The same view is taken in Mr. Mahaffy's translation.

except that I cannot regard as psychologically accurate Kant's account of two successive mental acts involved in any empirical judgment—*first*, the judgment of perception, and *then* the reference to an object. I recognise no such doubleness in my ordinary experience: but I so far agree that when I reflect on any judgment that I make concerning any external object, and ask what is implied in it which is not implied in a mere affirmation concerning a transient feeling of my own, I certainly find in it the implication of "universal validity," which Kant here makes explicit. I regard a mere sensation—using this term to denote a psychical phenomenon and not its physical concomitant—as existing, being *there*, for me alone; or at least, I assume that other minds can only know it representatively, by the exercise of imagination: but an objective perception is assumed to be the perception of something that is there, at least potentially, for all minds alike. As I have said, I find also implied in my notion of an object cognised, that it exists, *as* cognised, independently of my cognition; but, assuming for the present that this implication has been eliminated, I should be willing to accept "objective validity" as merely meaning "universal[1] validity". But I do not understand how Kant can with consistency assert that, conversely, a universally valid judgment must be a judgment expressing some property of the object. For Logic is, in Kant's view, an *à priori* science, in which universally valid propositions are laid down: and yet he expressly says—and indeed gives it as a reason for the peculiar success of Logic—that it has "not only the right but the duty to make abstraction from all objects of knowledge and their differences".[2] And even if we confine the statement to the mathematical and physical universals which Kant—while finding the ground of this universal validity in the mental conditions of knowledge, the forms of sensibility and thought—declares to be "objectively valid" or "valid of objects of experience," it still seems to me misleading to say that the universal validity of these judgments implies "the unity of the object to which they all relate". I cannot see that

[1] I have omitted the idea of 'necessity' because it seems to me to involve a certain ambiguity. The existence of particular objects of experience, *qua* particular, is commonly thought as contingent and therefore not necessary; but true judgments relating to them are thought to be necessary, in the sense that they cannot be contradicted by any right-judging mind.

[2] The quotation is from the third paragraph of the preface to the 2nd edition of the *Kritik*. Cf. also 'Transcendent. Logik,' Einleitung ii.: "General logic abstracts, as we have shown, from all reference of knowledge to its object".

it implies more than certain general resemblances in the objects of different minds. For instance, it would be quite possible for me and any of my readers to agree that two straight lines cannot enclose a space, or that every event must have a cause, and yet to have no agreement at all as to the particular sizes and shapes, the particular movements and other changes, of the material things that make up the external world of each of us. I lay stress on this, because it always seems to me one of the most glaring deficiencies in Kant's theory of knowledge, that he offers no explanation of the indisputable fact that we have all of us—speaking broadly—a common external world (though each of us stands in a different relation to it), instead of having a number of different external worlds subject to the same general laws. So far as I can see, while theorising at least ingeniously as to the origin and nature of the *universal* elements that enter into our notions of objects, he leaves the *particularity* of objects altogether unexplained: although the distinction that he explicitly draws, in the case of Logic, between "forms" of understanding and "objects" understood, would lead us to suppose that it is in the particularity of the object that the essence of its objectivity is to be found.

But I do not propose to dwell further on this point at present. Let us concentrate our attention on the universal elements which reflection shows us everywhere in the object-world of every mind: and let us consider more closely the analysis bywhich these universal elements are distinguished and classified, and by which the nature of all cognising human subjects is believed to be ascertained sufficiently for the establishment of valid critical conclusions about them—*i.e.*, conclusions as to the necessary limits of their possible knowledge. We find that two of these universal elements, Space and Time, are referred by Kant primarily to Sense as distinguished from Understanding: and since this reference is argued by him in a separate and preliminary part of the treatise—the idealistic conclusions of which are, I think, assumed to be established in the more elaborate analysis that follows—it will be convenient to take this more elementary argument first.

The "metaphysical" exposition of Space and Time as forms of sense—carefully distinguished by Kant, in his second edition, from the "transcendental" exposition of the same notions, in which the strict universality of mathematical (and even physical) cognitions is assumed—may be divided into two parts: Kant seeks to show in the first

place that Space and Time are mental forms; and, secondly, that they are forms of perception or sense and not of understanding. The second part of the argument I am not concerned to dispute: it seems to me completely effective as against the Leibnitzo-Wolffian view, and indeed its conclusion would, in my opinion, be indisputable, supposing the first part of the argument to be valid. I have no doubt that my notion of Space or Time is primarily the notion of a concrete individual fact, and not of a mere class of relations: hence if Space and Time are mere forms of human cognition—and not facts belonging to a real world whose spatial and temporal existence is independent of the existence of human minds —I shall not dispute that they are forms of what we may allow Kant to call the "outer" and the "inner" sense respectively.

But are Space and Time mere forms of human cognition? It is certainly not self-evident to me that they are not, nor do I think it capable of being proved from any self-evident propositions; but it is an inevitable assumption of my ordinary thought that they are what I apprehend them to be independently of my or any man's cognition: and I cannot perceive that Kant, in the 'Transcendental Æsthetic,' has given me the least fragment of a positive reason for abandoning this assumption as invalid. For brevity, I will here take the case of Space alone. His points are two: (1) that the notion of space cannot be derived from external experience, because in order that I may apprehend things as out of me and out of each other, the notion of space must be already there ("schon zum Grunde liegen"); and (2) that the notion of space is a necessary one, for I cannot imagine space annihilated, though I can very well think it emptied of objects. As regards the first point, it is indubitable that I cannot apprehend material things as being outside my body, or outside each other, without apprehending them as being in space, because the two notions are identical; but I cannot see that this proves the notion of space to be "schon zum Grunde liegend" any more than, *e.g.*, the notion of colour is in all visual cognitions. Introspection does not show me that I first perceive things to be there and then perceive them to be coloured: I perceive them to be coloured in perceiving them to be there: and yet no one maintains the notion of colour to be not derived from experience. It is no doubt true that I can imagine myself cognising things in space, as the blind do, without cognising them as coloured; but I know no ground for believing that this is what actually happens, in the case of persons with full visual organs. Re-

flection shows that observable progress in our experience of objects always takes place, not by definite additions of new elements, but by the gradual consolidation into definiteness of vague apprehensions of difference and similarity; so that the newest fact definitely apprehended is always apprehended by means of notions which in a sense were there before. I see, therefore, no reason why we should not suppose a simultaneous gradual emergence into definiteness of our notion of space along with other notions admittedly empirical. No doubt if, with some commentators,[1] we take Kant's "schon zum Grunde liegen" to mean merely that the notion of space is *logically presupposed* in the perception of extended things, this particular objection is irrelevant: but then, as it seems to me, Kant's argument has no longer even an apparent tendency to establish his conclusion. For this logical presupposition can mean no more than that the notion of space is involved as an element in the more complex notion of matter; but that can surely be no reason why it should not be derived from experience, if other elements of this compound are admitted to be so derived.

Let us turn, then, to the second argument, that space is a necessary notion, as shown by the psychological experiment of trying to abolish it. This argument seems to have been regarded as weighty by writers for whom I entertain a sincere respect; but I am bound to say that it appears to me to combine the two worst demerits that any argument of a systematic writer can have—it really tends to prove the reverse of the conclusion that Kant draws from it, and it incidentally contradicts another principle of fundamental importance that he elsewhere lays down. In the first place I must define carefully the only sense in which I can admit the impossibility of imagining "dass kein Raum sei". It does not seem to me clear that I cannot, at least for a brief period, eliminate space from my consciousness; indeed there seem to me to be at least two kinds of cases within my experience in which this result is often either nearly or quite attained, (1) when I am absorbed in the solution of an algebraic equation, and (2) when I am absorbed in listening to a musical performance. But I quite admit what I rather understand Kant to mean, that when I contemplate or consider space, I am unable to conceive it annihilated. Only this space that I am unable to conceive annihilated is not conceived by me as a mere form of my—or of human—cognition, but as something that exists independently of my

[1] *E.g.*, Prof. Caird, *Philosophy of Kant*, Part II., c. iii.

cognition of it; hence if it is legitimate to infer anything from the inconceivability of its annihilation, it must surely be the necessary existence of space apart from my sensibility, and not its necessary existence as a form of my sensibility: so that Kant's argument would really tend to prove the opposite of his conclusion. But does this characteristic, that its annihilation is inconceivable, really distinguish space from matter, as Kant here asserts? Certainly I do not find that I "can very well think" space without objects in space: and I should have supposed that Kant would have found the same difficulty, since he elsewhere gives it as a synthetical *a priori* cognition of the pure understanding that "the quantum of substance in nature can neither be increased or diminished". How can we "very well think" space as emptied of all matter, if it is a necessary condition of experience that we should think *in nihilum nil posse reverti?* Whither is the matter that is thought out of space conceived to go? Until this question has been satisfactorily answered, it hardly seems to me worth while to discuss the present argument further.

If then the "metaphysical exposition" of Space as a form of sense breaks down, let us see whether the "transcendental exposition," in which the strict universality of geometrical propositions is assumed, could render any effective assistance, supposing the assumption allowed. Why can I not have universal knowledge of space as existing independently of my cognition, no less than of space conceived as a necessary form of my cognition? Kant's answer to this question, as obtained by comparing the *Kritik* and the *Prolegomena* (§ 9), appears to consist of two parts; he holds (1) that I cannot know universal truths concerning "things-in-themselves" or objects that exist independently of my cognition, because I can only know the characteristics of such things "when they are present and given to me"; and he holds (2) that I cannot immediately know the thing in itself at all, since "its properties cannot migrate (hinüberwandern) into my faculty of representation" (Vorstellungskraft).[1] We ought to begin by considering the second of these arguments, since if valid at all, it would obviously render the first altogether superfluous; but I find it difficult to believe that Kant can have seriously relied on it. For if I cannot have immediate

[1] I have preferred to treat this part of Kant's argument in the form in which it is given in the *Prolegomena*, as being more clear and explicit. But the passages in the *Kritik* seem to me equally to imply the two tenets stated in the text.

knowledge of any entity unless it "migrates into my *Vorstellungskraft*," must I not for the same reason be equally unable to have mediate knowledge of it, or even any valid belief or conception of its existence? Thus Rational Psychology, Cosmology, and Theology would vanish in a twinkling leaving nothing for Criticism to confute; but with them also, the "the things-in-themselves" in whose existence Kant is determined to believe, and which he continually represents as causing in us the sensations which we refer to matter. And not only are material things in themselves thus eliminated, but all knowledge of other minds than my own is cut off; for another mind cannot migrate into my faculty any more than anything else can. Knowledge of my past feelings would seem to vanish also; since, as being past, they cannot form a part of the present operation of my cognitive faculties. I need not pursue the *reductio ad absurdum* further; it is clear that whatever may be the necessary conditions of knowledge, migration of what is known into the faculty of that which knows cannot be laid down as one of them: I pass, therefore, to examine the narrower argument on which, as I think, Kant has really more reliance. And I quite admit that it seems at first sight plausible to say that I cannot immediately know the *non-ego* except when it is present and given to me, and therefore cannot have certain universal knowledge about it. But on looking closer this reasoning seems to me to involve, in a subtle form, that confusion between psychical and physical fact which has been so fruitful a source of error in theories of cognition. The argument, in fact, transforms a merely material and empirically known condition of bodies acting on other bodies, into a dogmatically assumed condition of a mental operation. In our ordinary experience of material changes, the bodies that we find acting on other bodies appear generally to be in local contiguity: and it is possible that this is always the case, and that some day gravitation will be explained so as to exhibit the same general law. But what has this to do with the conditions of the purely psychical phenomenon which we distinguish as knowledge of matter or space? The Kantians do not surely mean to materialise mind so far as to localise it; if not, the object of knowledge can never be properly said to be in local contiguity to the knowing mind. What meaning then can be attached to the statement that the mind can only know what is "present and given to it," except that it can only know—in fact, what there is to be known? To

the geometer it undoubtedly appears that certain universal relations existing in the *non-ego* are presented to his mind as necessary; and Kant cannot surely maintain that the impossibility of this is self-evident: but, if not, the assumption that such knowledge is impossible stands revealed as a mere naked dogma, in the very centre of *soi-disant* Criticism. And the negative dogma has to be supplemented by a positive one: for if I cannot have universal knowledge of anything except the forms of my faculty of knowledge, why should I be able to state anything that will always be true of these? Is the future history of my faculty "present and given"? or its immutability? or its similarity to the cognitive faculties of all other human minds? If not, what can possibly be gained for the universal validity of our geometrical cognitions by transferring Space from the *non-ego* to the *ego?*

Here I must break off. It may perhaps be said that in all this article I have not really attacked Kant's stronghold, but merely skirmished in his outworks; since I have not dealt with the more elaborate and complete analyses (and synthesis) of the 'Transcendental Analytic' in which the combination of the forms of Sense with the forms of Understanding is expounded. It may be maintained that it is here that the real establishment of Criticism is to be found, all that precedes being merely preliminary and provisional. I am quite willing to accept this view of the case: and propose accordingly to criticise separately the argument of the 'Transcendental Analytic' in a subsequent article. And I shall be quite content with the effect of the present paper if the readers of it will come with me to the discussion of the 'Analytic' in a perfectly neutral state of mind, as regards the "transcendental identity" of Space and Time: since if these have not been shown to be forms of Sense *before* the argument of the 'Analytic' is entered upon, I am confident that this conclusion cannot be validly established in the course of that argument; and therefore that the complex hypothesis of faculties which Kant there puts forward to explain the fact of knowledge will be found to be generally unwarrantable, as well as forced and fallacious in details.

HENRY SIDGWICK.

(To be continued.)

V.—NOTES AND DISCUSSIONS.

SUBJECTIVITY IN PHILOSOPHY.—A REPLY.

Dr. Francis Ellingwood Abbot breaks his lances with much gaiety of heart, but his thrusts are not always so instantaneously fatal as he fondly imagines. In his recent article on "Scientific Philosophy" (MIND XXVIII., 488), he obtains over me what he evidently thinks is an easy victory, but only by means of an open and palpable, though doubtless unintentional, misrepresentation, which, since the question raised is of great general importance, I think it best not to let pass unnoticed. Dr. Abbot quotes the following passage from the very brief Introduction to my *Time and Space*:

"By the term consciousness, in this Essay, is always meant consciousness as existing in an individual conscious being; and proofs drawn from such a consciousness can have no validity for other conscious individuals, unless they themselves recognise their truth as descriptions applicable to the procedure and phenomena of their own consciousness. Doctrines, if true, will ultimately be recognised as such by all individuals whose consciousness is formed on the same type, that is, by all human beings."

On this Dr. Abbot comments as follows:

"Here is luminously presented the cardinal and universal contradiction in all non-solipsistic form of subjectivism: (1) The assumption that the Ego knows only the changes of its own consciousness; and (2) the assumption that the Ego knows other Egos to exist that 'are formed on the same type'. One of these assumptions necessarily destroys the other."

Now, in the first place, my words contain no assumption of an Ego at all, unless we suppose Dr. Abbot to use the word *Ego* loosely for "individual conscious being"; and secondly, granting this use of the word, they contain no assumption "that the Ego knows only the changes of its own consciousness". This assumption is not to be found in the words, either expressly or by implication. Nor can it be read into them from the rest of the book. It is an assumption which the book repels in all its parts, and more particularly perhaps by the distinction drawn out and applied at the beginning of chapter iii. between history and analysis.

What my words do contain is this: first, that the consciousness treated of in the book is consciousness in its ordinary sense, as every one knows it in his own case, not a transcendent or world-consciousness; secondly, that readers, in order to test the truth of what I bring forward, must examine their own consciousness, in which I expect what I say to find an echo. It is just because I think that the states of my consciousness are not *only* states of my consciousness, but are *also* a knowledge of something

not included in my "individual conscious being," that I urge other individuals to test them in the same way that I test them myself, namely, by the method of *introspection*. Employment of the method of introspection, by simply analysing consciousness, is not equivalent to assuming the total isolation of individuals, or Egos as Dr. Abbot calls them, from each other. *Consciousness as existing in an individual* is not equivalent to *consciousness having no knowledge beyond the individual*. The former expression speaks of consciousness quite generally, as found in *any* individual; the latter speaks of the particular consciousness of *one* individual. The analysis of consciousness as found in individuals must determine our views both of what individuality means, and what the relations are between individual conscious beings and their environment. The analysis of consciousness, as the prerequisite of assigning a philosophical meaning to any other term whatever, is insisted on throughout the book, but it is the *special* purpose of the passage which is quoted by Dr. Abbot from the Introduction, and wrested by him to imply the assumption of isolated individuality in conscious beings. I speak of consciousness *quâ* consciousness, and he understands me to speak of it *quâ* individual.

It would not have been worth while to correct Dr. Abbot's misstatement, were not the point raised by it one which is of prime importance, both in itself and for the place which it occupies at the very threshold of philosophy; so that a mistake in this matter may prevent our ever philosophising at all, however much, and in a certain sense ably, we may write on philosophical topics. Yet it is not my purpose, and I am not to be understood, in what follows, to speak on behalf of any other views than my own. For this I have no authority. Dr. Abbot has quoted me, among others, as an instance of what he calls "subjectivism" in philosophy, and has, in doing so, as I think, palpably misrepresented me. What I therefore wish to do is, to point out what I consider the true sense of the word *subjective* as applied to philosophy.

The point thus raised lies at, or rather across, the threshold of philosophy; through it you must enter or not at all. It is a peculiarity of philosophy to have one of its knottiest points at its very commencement, a sort of *pons asinorum*, passing which in safety you have already made some considerable progress in philosophy, not passing which, you remain an outsider. Whether it is to the advantage of philosophy to have so hard a matriculation, is not so clear. It certainly procures her many enemies in the guise of friends. But doubtless the maker of the human mind knew best.

One form of the *pons* may be thus stated: I have sensations and other feelings, and remember them; I see and feel my own body and other objects external to it; I see and hear other human bodies moving and speaking as my own body does; I connect my own movements and words with my own feelings and

volitions; I am finally aware that I do all this. Now where and what is the Ego?—Note before going farther, that all this is common sense, it is a description of consciousness as found in an individual conscious being. But it is not as yet philosophy. We have affixed no philosophical meaning to any of the terms used. Now we are going to attempt this. To return then,—Where and what is the Ego?

If the term is applied at all, there are only three things to which it can be, that is to say, (1) to the *I* defined as the awareness of doing all this, (2) to the *me* defined as one among the many objects of this awareness, and perceived by it always as materially embodied, (3) to both taken together. If the *I* is called Ego, then the Ego means nothing but abstract consciousness, abstracted, not from its own content, but from its agent or Subject. If the *me* is called Ego, then the Ego is equivalent to soul or mind, the agent or Subject, abstracted from consciousness. In the former case, the Ego is consciousness with unlimited content; in the latter, it is a particular agent or agency among others which compose our picture of existence. If, thirdly, the term Ego is applied to the *I* and the *me* taken together, this union of opposite attributes, a finite agency with an unlimited consciousness, is very difficult to think of as real.

Such is one statement of the facts which constitute what I have called the *pons asinorum* or *matriculation* in philosophy. Not that the problem consists in finding out how to apply the term *Ego* rightly, but in being aware of the most elementary difficulties which oppose themselves to applying rightly this or any other term of philosophical significance. In the case of the Ego, it is clear that we should be involved in immense perplexities in applying it in any of the three ways stated. If we applied it to the *I*, we should find ourselves dealing with abstract consciousness of objects, no matter what, under that term. If to the *me*, we should have the object, not of philosophy, but only of psychology before us, a being incapable of knowing anything save through the medium, possibly the distorting medium, of its own nature. If to both together, we should be identifying the Ego with a world-consciousness. We should, for instance, fall into the very contradiction which Dr. Abbot signalises, if we first called the *me* the Ego, and then identified it with that abstract unlimited consciousness signified by the word *I*: for, taken as the *me* and not the *I*, the Ego is one finite individual among many, and taken as the *I* and not the *me*, it is "only the changes of the Ego's own consciousness" that can be known to it. Any one who should do this could logically escape from the contradiction only by regarding himself as the *Anima Mundi*.

The first indispensable problem in philosophy, therefore, is to get a clear view of those facts or phenomena of consciousness, which compel us to draw the distinction between the *I* and the *me*. Not that it signifies what words we use to call them by,

so long as the words we select convey the distinction clearly. I do not remember using the opposition of *I* and *me* for the purpose before the present occasion. But the distinction itself is all-important. It is only by attending to it that contradictions like that signalised by Dr. Abbot can be avoided. Dr. Abbot seems to think that neglecting it is the panacea. Let us see why it cannot be neglected, why we *must* pass the *pons*, if we would philosophise.

When we first turn our attention to philosophical matters, we find ourselves as percipient agents in presence of a world of things and persons, which appear as objective agents. This is state the first. Next we become aware, that all our knowledge of objective agents, in the widest sense, is given us in the shape of consciousness. We and our consciousness thus appear to remain the only known existents. This is state the second. It may be considered as represented in the history of philosophy by Fichte. Next we notice, that our knowledge of our *self* is in precisely the same case as our knowledge of everything else; that our *self* is resolved into our knowledge of self, just as other objects were resolved into our knowledge of objects. Thus thought goes on sublimating the idea of agent, and removing one sublimated form after another, till with the removal of the last of them, say Fichte's Absolute Ego, the most sublimated form of all, the *limit* is reached, and, with a turn of the hand, you have knowledge of objects completely *generalised*, knowledge *per se*, cut loose from all individual beings, and stepping into their place as the sole individual being itself. Not agents perceiving and perceived, but consciousness subjective and objective, at once opposed and identified,—this is what now seems alone to exist. The affairs of consciousness are, so to speak, completely *liquidated;* agents must be got, if at all, out of the assets, not assets out of the agents. This is state the third. It is represented, I need hardly say, by Hegel, who, like Spinoza before him, is the exponent of Realism, not of Nominalism.

Now, as Hegel constantly urges, there is no escaping this dialectic, unless by renouncing philosophy altogether. And why? Because it is not possible logically to deny the identical proposition, that *whatever* is felt, known, inferred, or suspected, is part and parcel of feeling, knowledge, inference, or suspicion, that is, of *consciousness;* be the content what it may, even if it be something known to be in some sense unknowable. This identical proposition neither derives nor loses any part of its cogency from the fact that consciousness is found existing only in individual beings. It is when we identify consciousness with the individual conscious being, when, like Dr. Abbot, we can see no difference between the whole content of consciousness and a knowledge of the individual's conscious states, thus identifying its entire range of knowledge with a knowledge of its *terminus a quo* alone, that the contradictions which force on the Hegelian dialectic begin.

The fact, that consciousness is found existing only in individual beings, is itself a *known* fact, that is, a part of knowledge as a whole, and cannot be understood without reference to the comprehensive whole of which it is a part. And therefore the inquiry into consciousness as a comprehensive whole takes logical precedence of the inquiry into states of consciousness as composing separate individualities, or as arising in separate conscious beings.

This being so, what those who would philosophise have to do is plainly this, to analyse consciousness as such, and see what is meant by *agent* and *individual*, neither denying nor yet assuming them. To deny them is to assume a knowledge of them, and to assume a knowledge of them is to fall back into the same pre-philosophic state, the dialectic of which we have just witnessed. In other words, the facts of consciousness which constitute the *pons* must be fairly faced. But what many writers on philosophical topics do is not only to run away from the facts and fall back on the assumptions, but to represent the doing so as philosophy. I refrain from characterising this representation. But if, besides this, the contradictions flowing from these assumptions are attributed, by those who make them, to the very men who point out the contradictions as a reason for not making them, then that *acme* is reached of which Dr. Abbot has just furnished an instance.

Let us turn, however, to the philosophical way of dealing with the problem. The facts which constitute the *pons*, if fairly faced, will yield an entrance into the citadel of philosophy. Take consciousness to analyse without assumptions, attending to those facts in it which constitute the *pons*, that is, to those which force on the dialectic process just described, and it will be found that they constitute a *method* of philosophising, which method is applicable to the other facts of consciousness, and will bring out results accordant with pre-philosophic common sense, but in the form of results not of assumptions. We must use the facts of the *pons* as a method, going on beyond the *pons* and beyond Hegel; not making these facts the whole of philosophy as Hegel did, by identifying thought itself with agency, but singling them out first from all the facts of consciousness, formulating them as a method, and then looking at the rest in their light. We can neither stay with Hegel nor go back to Scholasticism. Those who after the experience of Hegel fall back upon Scholastic assumptions of whatever stamp, Substances, Subjects, *à priori* Forms, Innate Faculties, Reidian "Common Sense," or what not, are like Pliable in the allegory, who scrambles out of the Slough of Despond on the side he had fallen in from, the side next the City of Destruction. *Forwards* is the only watchword in Philosophy; and the facts of the *pons* are the means. That very function or operation of consciousness (taken simply as consciousness) which consists in its becoming

aware of *consciousness as its own content*, or objectifying itself, is that conscious function which is the special *organon* of philosophy.

It is only since Kant made Apperception the central point of his system that this could have been distinctly seen to be the case. Consequently it is only since then that the clear line of distinction between the different senses of the word *Ego*, or, in other words, between psychology and philosophy, could be drawn. Both have their origin in the same circle of facts of consciousness. But philosophy adopting the method of Apperception, otherwise called Introspection, or sometimes, as by myself, Reflection, ranges over the whole field of consciousness objective to apperception, analysing whatever comes forward therein, while psychology, assuming the *me* as an object already known to exist in space among other objects, investigates its actions and re-actions with those other objects, and the states of consciousness which result from them, in the character of their results.

We have long been familar in this country with the latter, psychological, line of thought, which, previous to the philosophical being contra-distinguished from it, is nothing but the development, more or less scientific, of the natural assumptions of common sense. The other, the new and philosophical line, is barely known at all, except in the shape of certain absolute idealistic theories, supposed to be its consequences, and most of which are understood to have been already given up in the country of their origin. It is not generally understood, that Kant was but the exponent of results in philosophy which had been slowly ripening since the time of Descartes, that he opened as well as closed an epoch, and that the fruit of his speculations is a method of analysis, philosophical not psychological, co-extensive with experience in its largest sense, and built on no other assumption but the existence of analysable phenomena.

The terms *Subject* and *Ego* came into vogue through Kant, indicating the same agent as the old psychological terms, *soul* and *mind*, but describing it by a different circumstance. *Soul* described it as living, *mind* as intelligent; *subject* and *Ego* describe it as self-conscious. By singling out the circumstance of self-consciousness to describe the agent, the foundation of a great advance *in point of method* was laid, namely that of abstracting, in thought, for the purposes of analysis, consciousness from its agent. Accordingly, Scholastics are discontented with Kant's change in the use of the terms *subject* and *object*, *subject* having previously meant a *substantia*, and *object* whatever was known to a psychical *substantia*, as so known. For Scholastics wish to retain the assumption of mind as a psychical *substantia*, and the assumption of *substantia* as an *a priori* conception in mind. Kant's distinction between consciousness and its agent lets in light on this double assumption.

The term *subjective*, therefore, in modern philosophy, does not mean belonging to an individual mind. Nor does *objective* mean known to an individual mind. "Subjectivism," as Dr. Abbot

calls it, does not involve "Solipsism". In modern philosophy, *subjective* means *as in consciousness*, and *objective* means *as in existence;* they express the two inseparable moments of an apperception. The distinction which they draw is between *knowing* and *being*, not between the mind and things known to the mind, both of which are things already supposed to exist objectively. This is the tool with which modern philosophy works, and by the use of which she is differentiated from psychology, which is a science, and stands on the distinction between the mind and things known to it, as a distinction already drawn. Philosophy stands on no prior distinction, but is the simple exercise of apperception with analysis of its content. It is experience itself. This is the true meaning of the *subjectivity* of modern philosophy.

This new method of modern philosophy is what the philosophical public has sooner or later to become acquainted with. So far as I know, it has found no exponent in Germany; though who can pretend to keep pace with the publications of a country where book-production is so enormously over-stimulated? One would be glad to think that, among those who for the last twenty years have been somewhat noisily harking back to Kant, some one had seen and disinterred that one point in his system, the distinction of consciousness from its agent, which gives philosophy as a whole a definite method, experiential not transcendental, without basing it on psychology. This definite method of philosophy, which makes it one pursuit, not a group of pursuits, I for my part call *Metaphysic*. It deals with the meaning of *Existence*, and philosophy can aim at nothing less.

The name, I am aware, is distasteful to the educated public, but, as I said, sooner or later they must become acquainted with the *thing*. Perhaps I have made it harder to obtain a hearing for the thing, by giving it so unpopular a name. Still I am convinced the name is the right one, and I hope that in the end it will appear so. A philosophy is really wanted, and the want cannot be supplied by giving us a group of philosophical pursuits. The unity of method, if it is a fact, (and it is), requires some more definite name than *Philosophy* to express it.

Apart from the name, however, there are far weightier reasons why the new philosophical method should be disliked and misunderstood. Nothing is more natural than the cleaving to old prepossessions. It is not yet seen, that analysis neither preserves nor destroys *facts*, but simply records them. What it destroys is—old prepossessions about them. If I analyse a triangle into three lines meeting each other at three angles, I do not destroy the triangle, though I may destroy the notion that it is the expression of an abstract principle of triangularity one and indivisible. So with the soul. If I analyse the soul into consciousness under some definite law of sequence and co-existence; or again, if I analyse it into some configuration of etherial sub-

stance, upon the functions of which a human consciousness depends; I do not destroy the notion of it as a reality. What I destroy is the prepossession that it is the expression of some abstract psychical principle one and indivisible. Of course, I may analyse falsely. But the remedy for that is *better analysis*. Analysis, not prepossession, is the ground to which we must come at last.

Still, however naturally a new method may be disliked, however difficult it may be to understand, there are two ways of attacking it; one by argument, the other by misrepresentation. Argument involves a real attempt to understand, and this I admit may be difficult in the face of honest prepossessions. No one respects common sense more than I do, but I respect it as common sense, not as philosophy. The functions of the two are different. Metaphysicians may have long to wait before they are understood; this they must expect; but at least they may resist being misrepresented.

I do not say that, when I wrote *Time and Space*, the book from which Dr. Abbot quotes, I could have stated the position therein adopted so clearly as I hope I may now have succeeded in doing. Thought proceeds tentatively in philosophy as elsewhere, from less to greater clearness, the application of the principles adopted bringing out their value and their scope. Kant himself is a notable instance of even the originator of a great principle not clearly distinguishing it from its *involucra*. Lesser men may, therefore, well be pardoned if, in their first attempts at applying a new method, their language is not always consistent with what increasing insight shows to be involved in it. The new method comes from Kant, it is true; but it was not to be found in him disengaged and ready for use. It had first to be quarried.

Kant's system was the issue of a conflict between two great lines of thought, the refined Scholasticism of Leibniz, and the sceptical empiricism of Hume. Kant was penetrated with the thoughts of both lines, and proposed his system as the settlement of their conflict. This is why the position which his system occupied was so commanding and central. And in this system, so commandingly placed, Apperception was the central point, and pivot of the whole; a subjective process, a process *in consciousness*. Hence the subjectivity of modern philosophy.

But note that this subjectivity is subjectivity of *method* only. To know what things are, *you must ask* what they are known as; *you must go* to apperception. It is a *direction* of how to philosophise. What is the Ego? *Go to apperception*. What is Existence? *Go to apperception*. But what is Apperception? Apperception is simply the act of acquiring distinct experience. The word fixes the loose term *experience* more precisely, ascertains its meaning. It is obvious that this prejudges no question whatever. Perhaps it will be said, surely there must be some one who apperceives; apperception is not possible without an appercipient. Very likely,

is the reply, but—*go to apperception.* Apperception, if anything, will tell you what an appercipient is. If it is known at all, it must be an object to apperception, for without apperception no experience.

Apperception, then, tells us what things are *known as*, what words describing them *mean*. It is the pivot-act of the method of our knowledge. It is not the creator or destroyer of the things which are its objects. It is not its own self-producer. What producing, maintaining, destroying, *mean*, what reality in the objects *means*, must be learned from apperception. But whether the objects have reality in the world of things, as well as in apperception; whether they are produced, maintained, destroyed, and when; that is, co-existently with what other objects they exist or cease to exist;—this must be learned *from the objects;* apperception witnesses only. Soul and body, for instance, are two objects of apperception. Apperception gives (1) their analysis, (2) their existence, as objects of apperception. But other objects of apperception, *viz:—the laws and existences of nature, whether seen or unseen*, give them their *reality*, in the sense of a place and function in the universe of things.

Apperception being thus the pivot of philosophical method, it is the method of philosophy, and the method only, which is subjective. The *content* of apperception is objective and real; at least, there is nothing *in the method* which militates against its being so. But the method is subjective thoroughly. Nothing is admitted as known except in terms of consciousness. All knowing is consciousness. But this is very different from saying that the Percipient, or Appercipient, is the centre. Take the *Subject* of consciousness for the central point, and the method is no longer subjective. An *assumed object* of apperception then usurps apperception's place. And moreover, the objects of that usurping Subject are affected with unreality; they come into consciousness through the medium of the Subject's own nature; he sees them not as they are, but only as they appear to him, he being what he is. A philosophy which understood subjectivity in this way would deserve the stigma of "subjectivism". In such a system, everything is topsy-turvy. An object is where consciousness should be, at the centre of knowledge; a tinged and refracted consciousness is where reality should be, in the objective universe of things.

The true subjectivity of philosophy, its subjectivity of method, is what gives it (1) unity, (2) correlativity, to the special sciences taken together. These one and all, single out some *object*, or group of objects in relation, as their subject-matter, and begin with assuming its existence. Not so philosophy. Philosophy begins with questioning *everything*. What is an object? What is existence? What is a subject? What is knowing? If the Theory of Knowing, *Erkenntnisstheorie*, assumes the existence of the Subject, it is psychology; if otherwise it is philosophy. But in this case it must proceed by the method of apperception. It is apper-

ception by which the distinctions between subject and object, knowing and known, knowing and being, are first drawn. Everything is thus tested by the subjective method of philosophy, that is, by apperception as an act of knowing, the act of experience.

Even apperception itself does not escape. It might seem, at first sight, as if apperception, being a conscious act of attention, so modified the states of consciousness which are its objects, as to prevent their being seen as they really are, distorting in the very act of perceiving them; as if it partly *made* the phenomena, while professing only to *witness* them. But it must be remembered, that an apperception is as much an object to subsequent apperceptions, as primary states of consciousness are to rudimentary apperceptions. Apperception can itself be analysed, and, by comparison of many cases, its comparatively invariable contribution to knowledge, the greater vividness due to its act of attention, can be distinguished from the highly variable contributions of its various objects. This cannot be done with the Subject, or with the Object, supposed as real factors of knowledge, because these factors, taken by themselves, have no phenomenal content. Whereas apperception, as subjective moment, is itself phenomenal and analysable, by subsequent apperceptions to which it becomes an object. In short, apperception is the name for a distinct experience, whenever it occurs; and, being phenomenal, one experience is controlled and tested by others. In this sense it is that apperception is tested by itself. If as an act of attention it modifies phenomena, it can also assign the limits of the modification.

Accordingly, when the final question is put, What is Apperception? it is put by one apperception to the rest, recalled in memory from previous experience, and the answer also is given by apperception. The answer, which turns partly upon the objective reality of acts of attention, can here be only briefly given, without developing the consequences with which it teems. It is this. Apperception, as an object of apperception simply, is the act of experiencing; but apperception, as an object in relation to other objects of apperception, is a psychological process, depending upon those real physiological and psychological conditions, which give to individual conscious beings their place and function in the universe of things.

SHADWORTH H. HODGSON.

THE UTILITARIAN 'OUGHT'.

I have read Miss Martin's able Note on this subject (in MIND XXVIII.) with much interest; but (through my fault rather than hers) she has not quite caught my view. I fully allow that the quantitative axiom or intuition on which I dwelt has no power to drive any one to adopt the universalistic rather than the egoistic standpoint. But the altruistic or universal-

istic impulse operates in conduct before it is philosophically recognised—(Miss Martin does not seem to have noticed that I expressly laid down as my fundamental fact 'I feel a desire for *your* happiness')—and its operation forces on me the conviction that it is happiness *quâ* happiness, not *quâ* mine, which is for me the general end of action; for while my seeking *my* happiness (which I often do) is quite compatible with the hypothesis that happiness *quâ* happiness is my end, my seeking *your* happiness is quite *in*compatible with the hypothesis that happiness *quâ* mine is my end. Nor does the immense amount of casual Egoism in the world at all refute my view that, with those who reflect at all, this attitude is the normal one. It is commonly not by deliberate choice as *against* the general happiness, that a piece of egoistic happiness is preferred, but by keeping the idea of the general happiness out of sight; or, in many cases, by some such 'flattering unction' as, *e.g.*, that the suffering which might be alleviated, at the cost of some indulgence of one's own, is so infinitesimal a drop in the ocean of misery as to make the sacrifice quixotic. This voluntary blindness or self-deception does not, as a rule, outlive the actual moments of gratification; and the perpetual reversion, in the intervals of life between, to the impartial and reflective standpoint of the general end, cannot but give to such moments the air of aberrations. And by calling happiness *quâ* happiness 'the general end of action,' I mean neither that it is what *ought* to be aimed at, nor what *is* at any moment desired or most desired: I mean that it is that with which the idea of ultimate end is most habitually associated. A man may say with truth that success at the bar is his ultimate and pervading end, without implying that he ought to have adopted that profession rather than another; and if he neglects important business for a day, and amuses himself in the country, which is what he that day most desires to do, he will feel unreasonable, because he has within a short period of time acted as if two mutually exclusive things, amusement and success at the bar, were 'the end'. I feel a similar unreasonableness when I adopt, through Egoism, some course which entails on the whole less happiness, less therefore of that which in my habitual view and by inveterate association is identified with end-stuff; for conduct gave me the chance of conforming to that view, in spite of my opposed egoistic desire. And here has come in the axiom. Happiness being posited as the general end, then, in every alternative which presents a pair of particular ends, it *ought* to be seen that that which entails more happiness is the greater end—has more of what is habitually regarded as conduct-directing stuff; and a jar is produced by conduct which, being directed to what has less conduct-directing stuff, would lead an impartial spectator to suppose that the above axiom is not seen.

Those to whom this view appears logical (if there be any such)

might still hold that it has no particular substance or importance. Personally, I should be hard to convince on this point; inasmuch as I never consciously prefer or feel inclined to prefer my own happiness to the greater happiness of others, without feeling an obstacle in the passionless axiomatic reflection that two is more than one, and that my happiness, since it 'cannot be a more important part of good, taken universally, than the equal happiness of any other person,' ought (from my habitual standpoint as to the end of action) to be a lesser aim than the greater happiness of any other person or persons. Whether the axiom, when this latter obligational form is given to it, ceases to be 'scientific,' seems to me a merely verbal question. The word is at any rate an intelligible one, to describe that quality of quantitative axioms which is common to them all, and in comparison with which any element that is not common to them all—that differentiates, *e.g.*, a quantitative axiom in Ethics from a quantitative axiom in Geometry—appears quite subordinate.

EDMUND GURNEY.

VI.—CRITICAL NOTICES.

A Study of Spinoza. By James Martineau, LL.D., D.D., Principal of Manchester New College, London. London: Macmillan, 1882. Pp. xii., 371.

That Dr. Martineau's reflections on Spinoza would command attention by their intrinsic value, and would be presented in a shape fitted to attract it, might be known beforehand. But I must confess to a certain agreeable surprise in finding how much ground we have in common, and how much of substantial agreement is possible between critics who set out, if not from opposite, yet from considerably different points. The agreement is enough to show that modern philosophical studies are not the chaos of hopelessly discordant conjecture which they are often assumed to be, and even to suggest that our existing divergences may turn out, in the view of successors capable of a larger comprehension than our own, to be less than they seem to us. Differences of result certainly remain; in the present case, however, those which I shall have to point out are in matters rather of interpretation, and that in points of admitted obscurity, than of general appreciation. I will premise that Dr. Martineau has equipped himself with all the resources furnished by modern research and discussion; a task of which the faithful performance, considering the rapid increase of the literature on the subject within the last twenty or even ten years, is in no wise to be undervalued. The work of criticism and inquiry which has of late thrown so much new light on Spinoza, some of it in quarters still but little explored by English readers, has been diligently mastered. Dr. Martineau shows equal familiarity with the textual and historical studies of Land or Sigwart and the strictly philosophical discussions of Trendelenburg or Camerer. The same thoroughness is apparent in the biographical part. No point is missed, and some new ones are made, such as the probable identification of the Spanish town of Espinoza whence the family of Spinoza took its name. And the photograph of the Wolfenbüttel portrait makes a welcome addition. It seems likely that this picture or a similar archetype is the origin of all the other portraits of Spinoza which are not misnamed or mere inventions of engravers. I do not at present feel sure that the engraving of 1677 is immediately derived from it, though apparently Dr. Martineau does; let us hope, however, that the still forthcoming volume of the Spinoza Committee's standard edition will clear up all doubts.

Here we are chiefly concerned with Spinoza's philosophy. Dr. Martineau gives good promise at the outset by his excellent note on the scholastic use of *formal* and *objective*, the first diffi-

culty which the modern reader encounters on the threshold of Spinoza's system: and he holds throughout to the cardinal principle of making Spinoza his own interpreter. If I have any general objection to make, it is that the earlier writings, the *Cogitata Metaphysica* and the treatise *De Deo et Homine*, are somewhat too freely called in. My own feeling is that outside the *Ethics* (and the letters immediately connected with their explanation) one is never quite sure, for various reasons, of having to do with Spinoza's mature and settled thoughts. In particular I believe the *Cogitata Metaphysica* to contain records of different and partly inconsistent stages of speculation, besides being conventionally limited to Cartesian lines, or what might fairly pass for such. These sources ought to be used only as secondary evidence, and then with great caution.

Among Spinoza's metaphysical doctrines that of the Attributes, delivered in the first and second parts of the *Ethics*, is the most fundamental; that of the eternity of the mind, delivered in the fifth, is the most difficult. I do not find myself remote from Dr. Martineau in the apprehension of either of these. It must be admitted that Spinoza's conception of Substance and Attributes is a speculation in unstable equilibrium. If we consider the plurality of the Attributes in their diverse kinds, the system seems on the verge of monadism; if we consider their unity as constituting one intelligible substance apprehended under these kinds by the same intellect, it seems on the verge of a pure idealism. Yet it is certain that Spinoza himself would have strongly rejected either alternative. It must be admitted, again, that in any view Spinoza's doctrine, as Dr. Martineau says, "does not clear the relation between the many and the one" in the sense of explaining the existence of finite things. I should say, however, that he never professed to clear it in that sense. But, on the supposition that we put aside and that Spinoza would have put aside as idle the question how things came to be many, does he clear the relation in the sense of showing us how to conceive the manifoldness of phenomena (being there in any case) in conjunction with the unity of Substance? This he certainly professes; and it is difficult to say that he accomplishes it. Let us assume that finite things, as given in Extension, or in any of the postulated Attributes to us unknown, are made intelligible—or real in the sense of modern metaphysic—by their correlation with their *ideas* in the Attribute of Thought. Consider, then, how it stands within Thought itself. Shall we take this and that *idea* of a finite thing (which, in Spinoza's special use of the term, may be but need not be in a finite consciousness, and anyhow is not the idea, *i.e.*, concept of the thing in the ordinary sense) as built up of simpler and ultimate elements, in other words, shall we treat the Attribute of Thought as a world of *mind-stuff*? Historically, this is not in Spinoza's way of thinking. Critically (and this appears to me on reflection, let me

say in passing, the fatal objection to all and any "mind-stuff" theories) our assumed element of thought or mind, when we have come to it, will be no better than a new variety of *Ding-an-sich*. Mind *per se*, as we may call it, obtained in this fashion, is no less nonsense than matter *per se*. Or, to put it in another way, we are trying to make a physico-psychological *auxilium imaginationis* do duty for metaphysic.

On the other hand, shall we treat the Attribute as not a composite whole made up of elementary parts, but a continuous whole diversified in many forms, as a plane by figures drawn on it? In that case we are effectually enough delivered from the nightmare, as old as Plato, of the multitude of unrelated particulars. But then Spinoza, who himself warns us that geometrical figures are not real things, may perhaps be chargeable witn leaving no more reality to any kind of things than to geometrical figures. The separateness and individuality of things do not belong to substance as it is "in itself". They are limitations of its boundless reality, and so far illusive, though not, when rightly apprehended, delusive; they are functions of the perceiving intellect. And this I believe to be the drift, if it is not the explicit conclusion, of Spinoza's thought. A *mode* (practically equivalent to *thing*) is an affection of Substance, subsisting and conceived in and through some Attribute. And we find in detail that the individuality of a corporeal thing is reducible to the permanence of a certain kind of relation between phenomena of molecular motion (*Eth.* ii., 13, Lemmas 1 and 3, and Def., pp. 88-90 in ed. Van Vloten and Land). Here, again, we are confronted with the Attribute as a blank field or "Grund der Erscheinungen," and with the inevitable question of critical philosophy—How is knowledge possible? It is with more zeal than judgment, therefore, that one or two modern expounders of Spinoza have striven to make out that he supersedes this question. It would not be fair to say, however, that he has no sense of it: he approaches it, perhaps as closely as in his conditions was possible, in his singular and intricate doctrine of the *idea ideae*: as to which I may note that I am not satisfied by Prof. E. Caird's extremely ingenious endeavour to remove from Spinoza's point of view the ambiguity which appears to me inherent in it. Take the concept of a circle, say, in the consciousness of Peter, a mathematician. This is, as a mode of the Attribute of Thought, *idea affectionis cuiusdam corporis Petri*. But as Peter's conscious thought, *idea circuli*, it involves no perception or knowledge of that affection. Are we to say that the knowledge of a mathematical theorem is not adequate unless, in the same act, it is consciously realised that a certain *affectio corporis*, namely, the process of molecular motion in the brain which is parallel to the act of thought, is its condition and correlate? Prof. Caird's explanation appears to me to require this or something like it. Neither can I find in Spinoza that the

equation of the two meanings of *idea* is confined, as that explanation seems also to require, to the case of adequate ideas.

The view that particular things are, as particular, relative to the understanding is incompatible with the view that Spinoza's *essentiae rerum* have any independent reality. Dr. Martineau holds, apparently following Camerer's argument on this point, that they are real and external. This introduces, to my mind, a needless and insoluble difficulty, which vanishes if we are careful to distinguish *infinite* from *eternal*, as Spinoza himself always does. It is true, I conceive, that every *res singularis* whatever is in a sense eternal, that is, *quatenus sub aeternitatis specie intelligi potest*; and further that this eternity is *quoad essentiam* only, since only God or Substance, whose existence is necessary, can be called eternal *quoad existentiam*. The *essentia* of a thing is really nothing but the sum of the conditions necessary and sufficient for its existence. Nature being uniform, those conditions are invariable so long as the meaning of our terms is not varied: the knowledge of them is a true knowledge independent of this and that time or place. To know a thing by its *essentia* is to know it *sub specie aeternitatis*, or, in Spinoza's language, its essence is eternal (not a *res aeterna*, for *essentia* is not *res* at all unless and until made actual in *existentia*). If at a given time and place the conditions are actually present, then the thing itself is present, or its *existentia* is determined.

In Spinozistic language the *essentia* of a circle in analytical geometry is that the general equation of the second degree be reducible to the form—

$$(x - \alpha)^2 + (y - \beta)^2 = r^2.$$

And whoever has mastered the demonstration of this may be said to know the essence of the circle *sub specie aeternitatis*, that which he knows being true throughout space and at all times, or rather without respect of time. Any given equation of the second degree which satisfies these conditions determines the *existentia* of a particular circle, and may be called its *actualis essentia*. The mathematical relation, whether expressed in the analytical or in the geometrical form, is *aeterna veritas*, or in Spinoza's habit of speech the essence of the circle is *aeterna veritas*. But to infer that it is an "eternal thing" in the same sense as the *res immediate a Deo productae*, seems to me without need and without warrant. I have taken a geometrical example for simplicity's sake and after the pattern of Spinoza himself (*De Intell. Emend., ad fin.*, p. 32, ed. V. and L.) though he does not ascribe reality to geometrical figures: but the reasoning appears to be no less applicable to the case of a *res singularis* acknowledged to be as real as a finite thing is capable of being.

In the same way Dr. Martineau goes with those who read into the self-maintaining *conatus* of particular things (*Eth.* iii., 6 and 7, etc.) a meaning which introduces—again without warrant, as I think—an element of contradiction into Spinoza's psychology.

I have nothing to add to what I have said elsewhere on the point: but it may be observed that this question and that of *essentia* must go together in any case, since the *conatus* is explained by Spinoza himself to be nothing else than the *actualis essentia* (*essentia* realised in *existentia*) of the particular thing: *cf.* the definition of *cupiditas* in appendix to *Eth.* iii.

With regard to the eternity of the mind, Dr. Martineau comes to much the same conclusions as my own by a slightly different road: and I have no criticism to make save that the exposition might in places have been improved by a minuter attention to Spinoza's own expressions. Thus Dr. Martineau suggests with some diffidence that the "intellectual love of God" seems to be identical with what is described in its psychological aspect as *acquiescentia* (p. 275, note). But there is really no room for doubt, since it is plainly said by Spinoza that the name of *animi acquiescentia* may be properly given to it (*Eth.* v., 36, Schol.) A charge of contradiction brought elsewhere against Spinoza in the purely psychological department (at p. 259) might in like manner have been saved by noting that the "aliquid bonum esse iudicare" of *Eth.* iii., 9, is not the same as the "vera boni et mali cognitio" of *Eth.* iv., 15. It is satisfactory to find that the attempts of one or two German critics to force upon Spinoza a doctrine of personal immortality in the popular sense meet with no favour at Dr. Martineau's hands.

The philosophical part of the book will not be easy reading, I think, to a student who has not the text of the *Ethics* before him: but I incline to count this for a merit rather than a defect. I will end with a little philological note for which I have no other context. Dr. Martineau thinks Spinoza's use of *honestum* and *honestas* in *Eth.* iv., 37, Schol. 1, a curious one. (Honestas = cupiditas qua homo, qui ex ductu rationis vivit, tenetur ut reliquos sibi amicitia iungat: honestum = id quod homines, qui ex ductu rationis vivunt, laudant). It seems to me that Spinoza's definitions almost exactly answer to the classical French use of the word *honnête*, current then as now, and doubtless familiar to him (abundant examples may be seen in Littré, *s.v.*); the *honnête homme* is he who adds to moral freedom from reproach courteous manners, and, to use Dr. Martineau's own term, "openness to friendship"—or rather to friendly intercourse and the amenities of good society, for *amicitia* is here more extensive and less emphatic than our English word. If this be so, there is nothing to be surprised at in Spinoza's Gallicism: he knew French as well as Latin, or possibly better. For the rest, *honestas* appears to differ from *humanitas* (*Eth.* iii., 'Affect. Def.' 43) only in being guided by reason to the purposes of a reasonable man's life, and thus bearing a distinct note of moral approbation.

FREDERICK POLLOCK.

The Alternative; a Study in Psychology. London: Macmillan, 1882. Pp. xxxi., 387.

The anonymous author of this book is a disciple of the Common-sense school of Philosophy. His adhesion is uncompromising—one may say Johnsonian. "Common-sense is the mental quality which disposes the bulk of men to unanimity under like circumstances, and to conservatism in respect of the actual system of their beliefs," and "tends to mould all accessions to belief." This tendency to conservatism of belief may easily acquire the momentum of prejudice and stolid disinclination to scrutiny and analysis. The author does not always take care to keep himself sufficiently aware of this. On the contrary, when one or other of certain data like "Free-will" is in question and at stake, his "moral and religious faculties" do not hesitate to assert their sacred privilege of rebellion, and call on "Will" to "decree the truth of the questionable datum!"

This device is called "the *arbitrium*". The *arbitrium* is the short and simple way "to prevent research from bolting". The other features of the author's *method* call for no remark; though he thinks that his procedure by "reconstructive definitions" is something new, at least in modern times. But this is only one of the many innovations, first discoveries, first riddances, &c., scattered liberally over his pages, which may not appear quite so new to his readers. His manner, however, is only the natural foible of an enthusiastic student, who, so far as one can judge by this book, has not read very widely in philosophy and psychology, and who loves to think things out for himself, and to coin words to fit his own thinking. It is, therefore, but the shadow that attends his ardour and freshness, and without it very likely we could not have had them.

The *aim* of the book is a very serious and earnest one—no less than the redemption of man from the evil that is in the world and in himself. The "reconstruction of psychology" is entirely subordinate to this main purport—"a mere husk". Two things fall to be said here about this "husk," and then it may be left for the main concern. First, it occupies three-fourths of the volume, and, secondly, it is not so much "a study of psychology," as a miscellany of psychology (often of the good old-fashioned kind called "rational"), ontology, theology, ethics, logic, metaphysics or *Kritik*, and transcendental biology. But the one thing needful is "*The Alternative*":—"Either puppet, dupe, and victim of unconscious forces, or self-denying conduct for the achievement of Wisdom". "My intention in laying bare the abjectness and wretchedness of our condition coincides with that of the Gospel without its supernaturalism and mysticism. It is to stir an insurrection against the Infernal in Nature, for the subversion of the reign of Instinct and substitution of that of

Wisdom and Will." It is already easy to guess that this gospel is Manichean, and that the saving truth completes its orbit round two foci—(1) Free-will, and, (2) the rest (?) of Nature and Human-nature. Its author has first to prove the existence of the Evil One, and this he has no difficulty in doing. Satan and his emissaries are those parts of conscious and "unconscious mind and its environment," which he has called "the Infernal in Nature". The Good Principle, again, is partly what is not infernal in nature, but chiefly the "free-will". Of course, he has also to prove the existence of Ormuzd, and that is not so easy; but when at a loss, he calls for an *arbitrium*. So the "Will" is a kind of *causa sui*, and by its own arbitrary intervention is made self-evident. It is at once defendant, witness, and judge; and thus confirmed in existence, is ready to enter on its redeeming career, which consists in re-inforcing and giving effect to "the moral faculties" and the supernal in nature.

Evidence in detail of "an unconscious part of the mind and of unconscious mental event," is to be found on almost every page, and Book ii., chap. 3, is devoted to a more concentrated and systematic psychological "deduction," which falls in with "the induction" (of physiology) that "the unconscious part of the mind is corporal". These are by far the most interesting and suggestive parts of the book, and comprise not merely an excellent *résumé*, but also many new and some notable contributions to the physiology of mind. Mind is defined to be "a concrete or sum of concretes that either is or involves what lacks nothing essential to a subject of consciousness"; and "bodily organs are constituents of the human mind"—not mere accessories. Accordingly the author's psychology is not of that lame kind that deals with mind as no more than "a complement of consciousnesses". Take a few of his varied illustrations. He finds unconscious mental event or state presupposed by the emotional intimation that seems to say to the man of letters—'Now is the time to write'; "to the mathematician, 'I am about to solve the problem for you,' to the poet, 'Your muse is about to sing'". Unconscious or cerebral mind is the muse of the poet, the genius or dæmon of the philosopher, the paraclete of the saint. It must be "an unconscious equivalent of an intuition of a quantity of time" that determines awakening at a purposed hour. Mr. Lecky, in his *History of Rationalism in Europe*, shows how unconscious mental events, accumulating, have undermined belief in miracle, and the supernatural generally. There is a striking passage in *The Grammar of Assent* to the same purpose, ending with these words—"As assent sometimes dies out without tangible reasons sufficient to account for its failure, so sometimes in spite of strong and convincing arguments it is never given," which words point unmistakeably to unconscious mind, or cerebration. So too, the growth of the historical sense, and of the cultured literary sense that Mr. Arnold sets so much store by, supposes

latent change and development. "Events in which scrutiny may detect unconscious equivalents of conscious restraining prudence are common." Recalls to interrupted work, and returns in discourse to the question, sometimes imply such equivalents. And so on, till our author concludes that such psychological observation and inference, "coupled with physiological induction, establish overwhelming proof that all consciousness is the effect of unconscious event, and"—he goes on to add with strange inconsistency—"and, that, *except in the few instances of men who, at the cost of self-denial, endeavour to live according to Wisdom*, all human intentional action is the effect of unconscious unintuitable event". The italics are ours to nail the self-contradiction. And the inconsistent exception brings us to the second pivot round which his doctrine turns—"Free-will".

A series of definitions leads up to "Will". "Intention is a bent of the mind to act according to a present guiding idea"; but "choice" is a twofold intentional act of a unique kind, namely, a study of motives followed by a "preference" of one, but in such wise that the "preference" involves neither *bent* nor *accordance*, as it is "an uncaused event" and "not determined by any antecedent": and so the *differentia* of this species of "intention" denies and excludes the genus under which it is subsumed! "Will is power or faculty of choice." That is to say, it is the cause of uncaused events! "He who affirms that an event presupposes a cause, denies the possibility of choice." Rather say, he thus *affirms* "the possibility of choice" as defined, since he preserves the unity of the twofold single act, by enabling "the study" to stand in some relation to the other constituent element, "the preference". But it appears that the datum that every beginning has a cause, must "humble its pretensions to another exception, *viz.*, that a beginning of this or that part of Time . . . is uncaused". Unfortunately for the lonely exception, "volition," in search of a mate to give it countenance and help, abstract void time, or time-in-itself, if conceivable at all, can certainly not be conceived with *parts* and *beginnings*. The *contents* of time are evidently what make it divisible into "hour, day, year, or century". It is only they that begin and end; and these events in time are not uncaused—"volitions," of course, excepted. Yet stout free-willer as he is, the author allows himself to speak of "the *reasons* of voluntary conduct, duty, dignity, love of the divine". It has reasons, and is yet undetermined! But when driven to bay by the determinist arguments, which it must be said he shows no wish to ignore or elude, he takes refuge in an *arbitrium*. Let the Will "decree that Will exists, that we are responsible!" As if such creation out of nothing was not the end of all responsibility. *Fiat Voluntas!* To what, then, is caprice self-created and self-enthroned, to be answerable, amenable, or conformable? Is character to be charged with conduct that does not issue from it? See how lawless and irrational this autocrat

"Will" is in a sentence that follows:—"And what though the *arbitrium* cleave to an error, if it achieve for man the greatest possible dignity and happiness. . . . Truth . . . is of infinitely less importance." But he is not quite easy about leaving "Will" sole and sovereign umpire in its own quarrel, and returns to his dialectic. Take this sample of a rebutter:—"Regularity of conduct would be characteristic of a reign of Will, and the regularity would be a condition of predictableness." "Regularity," the issue of what is determined by no rule, and conforms to no law! It is difficult to see what need he has for such paradoxes, when in the immediate context he gives admirable demonstration that neither "attention" nor "intention" requires free-willing. If, then, without these dissolute atoms of uncaused event, we can be *intent* on Wisdom, *attend* to Righteousness, and dwell on it, what more is needful to salvation? Has not his gospel unnecessarily burdened itself with "Free-will"?

If this be so, and he could have known it in time, it might have saved him from the next prank of this "Old Man of the Sea," when it entangles him, as he thinks it cannot help doing, in sundry speculations about "the Soul". "A free-agent must either be, or involve, a soul." Here, again, he fails to note that chaotic uncaused events stand in no need of any common cause or place, and admits of none, coming as they do from nowhere out of nothing; and, further, it must be said they have nothing in *common*, for if they had, they would be mutually determined—and so extinguished. And again, if no faculty or agency, "will," is required by them, much less is a soul, as a subject for this unnecessary and impossible "will" to inhere in. The soul is superfluous twice over. Besides, on p. 214, he has put the case of the body as "choosing agent," and free-will obtaining notwithstanding. The soul is, therefore, for him a threefold supernumerary. Yet it allures and engages him. He inclines to the supposition that "certain atoms are qualified to be, in certain relations, subjects of the quality, life," and conscious life. But why only *certain* atoms? Why exclude any from the kingdom of life and mind *in potentiâ*, if we admit any? Then there would be souls in the stones, but badly circumstanced, imprisoned in uncongenial surroundings. Every stone, in fact, would be a disorderly concurrence of potential souls, any one of which might, at any time, when more happily situated, become "a cardinal atom," living and life-giving nucleus of an organism, formed of other atoms, less emancipated and less wise for themselves, gathering around it in subservience and conformity; and for final beatitude might even attain to be subject of consciousness and "free-will". The hypothesis is certainly not new; it is, he admits, "the reverse of prepossessing"; but "it is the only visible plank within reach of the drowning datum, that animals and plants are durable things," and also, of course, the datum of free-will; and so, "however improbable" it may be, "common-

sense *demands*" its adoption to save these doctrines, and our personal identity and continuity here, and perhaps hereafter! It is after all only one *arbitrium* more. But what does it save? Not "free-will" as we have already seen. And can we be sure that atoms are "durable things"? An elaborate chapter on "Substance" makes this more than doubtful, tending to show that atoms are nothing but concretes, for us and so far as we have gone "ungenerable" and undecomposable; nay, that any apparently simple single thing is "a veiled plurality," an aggregate or complement of attributes or relations which have and require no subject or support but themselves in their togetherness. Where then in this unsubstantial flux and endless multiplicity of relations, relating to relations with no principle or term anywhere, is the author to find "unity" or "permanence," or "durable things"? The "soul" or "cardinal atom" is only the brain writ small, and inscribed (shall we say?) in the pineal gland; and, as *Idem per idem* is no explanation, the "drowning" data are not thereby resuscitated. At the best, we are only back again at the body "as choosing agent," or cause of, uncaused events. The episode of the "soul" proves interesting, but fruitless and suicidal.

He is ready to extend "The Reflex Theory" to all human activity "volition excepted," and the *rôle* for which "Will" is retained is "the transference of man from one kind of reflex actions to another, from primary automatism, which makes him puppet, dupe, and victim, to a secondary automatism conformable to wisdom". Is this 'the happy dispatch' of Free-will, or is it still to remain, enjoying *otium cum dignitate*, its occupation gone? There follows an inquiry into the factors and constituents of this ultimate beatific automatism of Wisdom, "whose *service* is perfect freedom". The author is intuitionist in Ethics. His morality is absolute. The "moral faculties" and conscience are innate. This precludes any inquiry into their genesis. "The idea of the moral imperative symbolises it as a thing that is independent of the contingent." Yet "it is knowable only by" (as?) "a contingent aspect which depends upon the emotive constitution of the person knowing!" With these presuppositions, it will be understood that he adds nothing to the utilitarian controversy. Indeed, he scarcely enters on it. Yet, he includes Happiness, and such "praeter-moral" constituents as "health," "beauty," and "circumstances that enable prudence and industry to exclude pain," in the *Summum Bonum*, in this following Aristotle. The cardinal constituent is Wisdom; the rest are Generosity, Courage, and Fortitude. The highest good is a social ideal. "Wisdom is heart-knowledge (*i.e.*, "sentiment" or "emotive perception") determined by impero-moral goodness, and combined with a knowledge of human nature that exempts the subject from imposture,"—a very shrewd and English appendix! *Impero*-moral goodness comprises Reverence and Benevolence. But why

exclude the three kinds of magnanimity above-named? Surely, they may interest a quickened conscience, and be determined by the sentiment of obligation or duty; may be felt to be imperative as well as beautiful. Benevolence and Reverence are also kinds of "altruism," and that is "disposition to confer benefit on another". Has Reverence this mark? Elsewhere it is defined to be "the sentiment of the sacred" disposing to worship and politeness. What is "the sacred"? Its proper parts are "dignity and sacred authority," yet it does not exclude "the flagitious or imbecile," and appears capable of surviving faith in both God and man (p. 348). In another place, Reverence comes to include or supersede Justice and Equity and the mere "*Consuetudinal* Moral Faculty". Benevolence, again, may become "*Super*-affectionate," and then it is "adult"! This is the enthusiasm of humanity, and the Buddhist love of all living things. But how can it ever get beyond affection, and what would it be worth if it could? Of a piece with this, is the picture of the perfect man (p. 364) who has attained to "detachment," and can "painlessly dispense" with "sympathy and mutual helpfulness". He takes no pleasure in those things, and yet, "*cherishes*" them! Such a pitch of "non-egotistic altruism" is inhuman and absurd, but very well illustrates the larger *Egoism*, which altruism cannot transcend in its most strenuous flights, because it is the ground and atmosphere of both egotism and altruism. "Adult benevolence" is "Charity," whose counterfeit is "love of the neighbour for *God's sake*". Yet, "the vicarious charity or counterfeit of charity which Christ set in motion was a means of indirect culture of Benevolence". This is what Reverence, feeding on theology and making the food it feeds on, has done for the world, and our author's hope is, that, while "godliness" is not "goodness," and the counterfeit is neither the reality of true human loving-kindness nor its equivalent, yet in some way they may become transmuted into what they simulate, and what has been well done for God's sake, may come to be better done for Man's sake. The Christian ways and means were indispensable, but "if Christ's enterprise succeed, the tissue of godliness will be converted into the tissue of Wisdom."

Is not this very much like saying that an immense secular illusion was needed to deceive man into "goodness"? And how can "godly behaviour" effect any "transmutation," when no previous conduct bears any relation to present "choice"? Is not the attainment of the highest good as likely or as little likely without as with Christ, since "uncaused events" can be neither helped nor hindered? "Free-agents" may begin to-morrow by the grace of Fate, Chance, Caprice, or Free-will,—for those are all names of one goddess—to perform acts in accidental conformity with Wisdom; and they may equally leave them off the day after. There can be no prevision either way—no probability—only and always barren and bewildering possibility. Endowed with free-

will, man cannot be "puppet, dupe, and victim of unconscious force" nor "fool of nature," supernal or infernal. The fatal gift condemns him to be the victim of Chance for ever. Neither heaven nor hell can prevail against it. There can be no stability anywhere in human nature—only perpetual disproof of the obsolete phrase, *Ex nihilo nil fit*. This article of the faith is a traitor let into the camp unawares—a piece of supernatural dynamite. To save the purpose of his book, the author should have been content to oppose to "the infernal" "the divine" in nature and man, including the "intention" and "attention" that obtain in the order of nature; and to place his hope and confidence in "the orderly concurrence of aptitudes" that makes for Cosmos and Wisdom, discerning that the "dependence of personality on self-denial" is its dependence on a higher self, which in denying the lower only affirms itself, and that freedom is this inward necessity, or self-determination by a self that is never undetermined and devoid of character. The goal may be beyond our reach in any case: with "free-will," it *must* be.

The miscellany contains many curious observations and reflections. Through it we travel by devious ways, often eccentric, sometimes irrelevant, always interesting and pleasant. We make the tour with a friend, who is a very "uncommercial" traveller, fond of by-ways, of contemplative loitering, of what may be called minute metaphysical botanising by the way, a lover of subtle distinctions for their own sake, and of new names for his new "species". There is a great deal of "definition," but very little "reconstruction"; aphorism and epigram, but no system. Thus: "Apperception" is not "Reflection," and neither provides the way of studying consciousness. "You attentively perceive self, and *inattentively discern* (apperceive) self as *subject* of the attention." But can the self-feeling or sense of intimacy that usually accompanies our perceptions, be called discernment, *i.e.*, is the subject ever object? At all events, "apperception" tells us nothing about the *Ego*, or subject of consciousness, which may be an illusory symbol (p. 136). "Reflection" is "attentive perception," of a state of consciousness, and like all "perception," is entirely referent to objectivity. When we reflect, we feel or apperceive that we are doing so. No "intellectual operations" will stand the gaze of "reflection" or direct introspection. So far Hume and Comte were right, and yet there remains a way for psychology in the study of "records". Several pages are occupied with an account of "incomplete unapperceived consciousness," and nowhere is his subtlety finer. This kind lies between "unconscious mental event" and "complete apperceived consciousness". There is a genealogy of "Reason":—"Thesic affection," "Thesis," "Judgment," "Reason". The first is sub-conscious. "Thesis" is nascent unapperceived judgment. "Inference" implies "discovery"(?) There is cerebral redintegration underlying Hamilton's. Such is unconscious "general synthesis" or attribution, whence

arises knowledge of concretely qualified things. Unconscious memory is like a phonograph, and something more, for "recognition" does not always imply prior discernment. "Sense-perception" does not receive very adequate treatment. What there is, is mainly on the lines of Reid and Hamilton. The seeming of independent outness is trusted, but not explained; unless the "inapparitional constituents" of percepts account for and justify it. One of these is the intuition of "power". We discern relations which are independent of discernment. These form "inapparitional objects," and are not to be confounded with so-called "abstract ideas" which are only terms or words. There is no "abstraction" but only "subtle discrimination" of elements in concretes, and distinction of inseparables. So far Nominalism holds. But "the supersensuous faculty" which intues "inapparitional objects" may be wanting in minds like Hume's and Extreme Nominalists. Perhaps they are cases of arrested development, or survivals. Nevertheless, their disability does not prevent the author from engaging in the customary argument with Hume and Mill, which is forcible, and fresh, and inconclusive. In truth, it is not a question of dialectic, but of "discernment". Like "gulfs yawn between different orders of mind as regards the ideas of Time and Space". To the author, Time and Space are not given at once infinite or indefinite, but "piecemeal"; and in the case of Time, he thinks the idea of the future may obtain before that of the past. To him, they are given "void," to others with inevitable content. To Kant, they are given as subjective forms, to the author as objective and symbolic of existence independent of the percipient. To Kant *à priori*: to the author, "in experience". A chapter is devoted to proving that there is no *à priori* knowledge whatever. Lack of faculty for "paradoxic experience" may disable one for perceiving motion, since it "involves the seeing at an instant what coincides with a divisible time". A similar structural divergence or incapacity may account for any want of appreciation of the chapter on Logic. But that "on Number" is very striking and congenial. Equally sympathetic is the humorous definition of Philosophy—and very appropriate to end with. "When speculation achieves a knowledge of a system of explanatory general theses short of being satisfactory to common sense, its product is a Philosophy."

J. Burns-Gibson.

On Mr. Spencer's Unification of Knowledge. By Malcolm Guthrie. London: Trübner, 1882. Pp. 476.

In this large and closely reasoned volume Mr. Guthrie follows up the criticism of Herbert Spencer which he put forth in his previous work *On the Formula of Evolution* (Mind XVII. 150). The main object of his investigation is to decide how far our great evolutionary

philosopher has really attained that which he himself sets down as the goal of all philosophy, namely, the unification of knowledge. Mr. Guthrie treats his subject so minutely and with such detailed precision that it is impossible to give even an outline of his central argument within the limits of a brief review. He takes up Mr. Spencer's various positions, one by one, in *First Principles*, in *The Principles of Biology*, and in *The Principles of Psychology;* examines them each in separate detail; and inquires how far they are consistent with one another, or how far they really tend to unify knowledge. Every apparent *lacuna* in Mr. Spencer's exposition, every seeming change of meaning in Mr. Spencer's terms, every suspected shade of shifting connotation in Mr. Spencer's language, is subjected to a rigorous and searching logical examination. In particular, all those ideas, such as "equilibration," "polarity," and "physiological units," which are most peculiar to and characteristic of Mr. Spencer's thinking, are analysed in the most thorough manner, and every possible flaw in their composition is carefully exposed. Moreover, sundry side-arguments are directed against Professor Bain, Clifford, and other upholders of the double-aspect theory, as well as against Spencerian evolutionists in general (including the present writer). All these arguments are extremely close and sustained in character, oftenest turning upon that most fundamental of all critical points, the nature of the terms employed. It will be obvious, therefore, that a reviewer can only deal with the book satisfactorily from the point of view of its tone and general purport, rather than from the point of view of its actual content. To criticise a work so minutely critical, to analyse what is itself a condensed analysis, would clearly be impossible in anything less than the space occupied by the original under review.

Confining consideration, then, to the manner in which Mr. Guthrie has performed his work, and the spirit in which he has undertaken it, we may pronounce his book a useful critical aid to the student of Mr. Spencer's volumes. Mr. Guthrie assumes no attitude of determined hostility to the evolutionary system: on the contrary, he is in all essentials an evolutionist, though he cannot always accept tne shape in which Mr. Spencer presents the doctrine to us. In his present work, he takes up definitely as his text the unification of knowledge, and to that text he sticks throughout with commendable closeness. His central contention is that Mr. Spencer uses the phrase in question in several distinct significations, or rather that he has several distinct methods for unifying knowledge, none of which will really effect his purpose, but of all which he continually speaks as if they were merely one and the same. Many of these criticisms are acute; some of them are extremely subtle; and others seem to us to fail through insufficient realisation of other people's philosophical concepts. In dealing with the continuity of motion, with polarity, and with several other allied physical questions, Mr. Guthrie brings up

various striking objections to the mould in which parts of the Synthetic Philosophy are cast; and these objections, based mainly upon the recent theories of energy, have probably occurred to many other critical readers of Mr. Spencer's works. On the other hand, his criticism of the double-aspect theory seems to us to fail from a certain incapacity on the author's part to place himself exactly at the standpoint of his antagonists; nor do we think that he has ever really succeeded in thinking himself into the idealist position, even to the extent necessary for combating its main points. Again, he has hardly entered fully into the kernel of Darwin's theory of natural selection, especially as regards the fundamental importance of so-called spontaneous variation. But on the whole, nobody can read his careful critical examination without feeling that he has thrown light upon the central thread of Mr. Spencer's reasoning. Whether one agrees with him or not, he compels one to follow the text closely, to compare part with part, to ask one's self definitely whether this statement is or is not consistent with that. Sometimes we may think he fails fully to catch Mr. Spencer's meaning: sometimes we may recognise that he has the advantage of employing a later and more precise physical terminology against an earlier and less accurate one: sometimes we may frankly acknowledge that he has hit upon a real gap in the exposition, or a real desideratum in the logical argument, which ought to be filled up or rectified by future evolutionists. Especially may we admit that his work has genuine value as suggesting lines of future research by putting a finger down definitely upon the weak points of our existing knowledge or our existing theories. But the most important fact about the book is its strict and obvious honesty of purpose. Whether we agree with Mr. Guthrie or disagree with him—and we have occasion here and there to do both—we feel throughout that his one object is to elicit truth, not to gain a party triumph. He starts with no prejudice or prepossession, and he tries to the best of his ability to arrive at a just judgment. Owing much to Mr. Spencer, he differs greatly from the common critics, who are mainly actuated by theological *animus*. This characteristic desire for fairness and freedom from bias makes his criticism a really useful one for philosophical students: and while we have often seen cause to disagree with him during its perusal, we cannot deny that we have found it eminently suggestive, and of no little use in aiding to clear up and define many floating notions upon various hastily-accepted forms of current thought. Several of his points are well worth answering hereafter, and at fuller length.

GRANT ALLEN.

Metaphysics: A Study in First Principles. By BORDEN P. BOWNE, Professor of Philosophy in Boston University, and author of 'Studies in Theism'. London: Sampson Low, 1882. Pp. xiii., 534.

A work on Metaphysics in the proper meaning of the word, and a pretty comprehensive treatment of the subject, deserves attention. Prof. Bowne divides Philosophy into the theory of knowing, investigating the possibility of knowledge, and Metaphysic, investigating the true nature of reality. To the latter problem his own answer, constituting this book, is given under the old-fashioned but useful division into Ontology, Cosmology and Psychology: treating of Being, the World and the Soul as objects not of "empirical" but of "rational" cognition; not as phenomena, but as they really exist, or rather as it is necessary for us to think about them. That it is time to bring these subjects again before the English public in a comprehensive way, and to reconsider them in the light of all that has been learned since Hume's day, will probably be admitted, however little agreement there may be as to the likelihood of reaching positive results, or as to the method in which the inquiry should be conducted.

His own method our author derives from Herbart. "We take," he says, "the theory of things which is formed by spontaneous thought, and make it the text for a critical exegesis in the hope of making it adequate and consistent. We take the notions of common sense as they exist, and the functions ascribed to them, and change them only as reason itself prescribes" (p. 19). That is, he takes the notions of common sense about Being, Change, the Finite and the Infinite, Space, Time, Force, &c., and compares them; and if any variance or contradiction appears, he either modifies one or another, or rejects such as are least reconcilable with other conclusions, until the greatest attainable harmony results; and this remainder, he contends, is "how we must think about reality". He does not, however, confine the examination and comparison of notions to the jetsam and flotsam of common sense, but extends his survey to the definitions of physical science, and to the distinctive doctrines of philosophers: hence much of the book is controversial.

At the very outset there is a controversy as to method. Prof. Bowne rejects the Psychological Method of inquiring into the origin of ideas as "utterly inverted and worthless". He says:

"When ideas come their validity can be decided only by reflection on their content and the evidence with which they appeal to the mind. After a belief is found to be groundless, the psychological account of its origin is in order, and has a certain interest; but before this it is philosophically irrelevant. Misconception on this point is as common among the intuitionists as among the empiricists. The former think a proposition is placed for ever beyond the reach of attack when it is shown to be innate; as if the innate must certainly be true. Indeed the empiricists themselves

agree with the intuitionists upon this point. Mill in his *Examination of Hamilton* admits the infallibility of primitive beliefs, but raises doubts as to what beliefs are truly primitive. He thinks that if we could look into the mind of the baby as it lies in its nurse's arms, we should get the original philosophical revelation" (p. 13).

Without commenting on the general looseness of statement in this extract, some remarks may be made upon now prevalent misconceptions of the Psychological Method. It seems to be supposed that according to experientialists every belief of which we can trace the origin must be false, and even that if any belief could be shown to be innate it must be true; but in fact they hold neither position. Let us notice the latter first. When Mr. Balfour (with whose book our author is well-pleased) quoted from Mill, to prove his agreement with Hamilton, the passage above referred to, many readers were surprised, as they were perhaps meant to be. Mr. Balfour, however, admitted that Mill's declaration had, in relation to his doctrine of evidence and the bases of his philosophy, no significance, since he thought no beliefs were original. The reader's surprise testified to the reasonableness of this admission; for had the case been otherwise, had innate ideas played any positive part in Mill's logic or philosophy, it would long ago have been familiarly known, and the passage quoted (*Exam. of Hamilton*, p. 172, 3rd ed.), instead of being an unexpected revelation, would have been underscored in every copy.

But I am inclined to go further, and to doubt whether the passage in question really bears the sense that has been put upon it. I will transcribe a sentence: "Could we try the experiment of the first consciousness in any infant—its first reception of the impressions which we call external; whatever was present in that first consciousness would be the genuine testimony of consciousness, and would be as much entitled to credit, indeed there would be as little possibility of discrediting it, as our sensations themselves". For Mill's phrase, "the genuine testimony of consciousness," adopted for economy's sake from Hamilton whilst arguing with him, Mr. Balfour proposes to substitute by way of improvement, *original judgment:* but this is a mistaken kindness. The word *judgment* in its proper and natural use stands for a somewhat complex state of mind, often for a state having the suggestion of generality, and therefore at least partly representative. But I suppose that Mill in writing the above sentence did not contemplate the possibility of the infant's "first reception of the impression we call external" being other than a simplest, particular, presentative state,—one therefore which, though possibly differing in some way from "sensations," agreed with them in this, that it was what it was, and could not be discredited. This certainly is characteristic of every simplest, particular, presentative state of consciousness whether the first or any subsequent. It is true that the words *credit*, *belief*, and their opposites are strictly inapplicable to such states; but they are used by

Mill in the same sense of the "first consciousness" and of sensations.

On referring to Mill's next sentences, however, it may be thought that this defence will not suffice. "But we have," he goes on, "now no means of ascertaining by direct evidence, whether we were conscious of outward and extended objects when we first opened our eyes to the light. That a belief or knowledge of such objects is in our consciousness now, whenever we use our eyes or our muscles, is no reason for concluding that it was there from the beginning, until we have settled the question whether it could possibly have been brought in since." Here, it will be said, he speaks of "beliefs or knowledge," which must be somewhat complex, and different from those sensations which are admitted to be generally Mill's data. I confess that the language is not perfectly guarded: but neither is that of other writers; and in their case particular expressions are interpreted in the light of general doctrines. Mill must be treated in the same way; and my interpretation is that, between the sentence first quoted from him and the two last, his mind made an unrecorded transition from an hypothesis about original consciousness, which was not inconsistent with his own views, to a different hypothesis such as he thought his opponents might be capable of, but which, as his treatment of it shows, he himself was far from entertaining. The correctness of this interpretation cannot be proved, but must be submitted to the judgment of good readers. If it is right, there is no ground for attributing to Mill the doctrine that innate or primitive *judgments* or *beliefs* must be true. Yet upon the strength of this passage Prof. Bowne attributes the doctrine to empiricists as a body: whom, indeed, he rarely mentions without making a mistake. Probably no experientialist thinks any belief is really innate even in the individual; but to the earlier organised beliefs most would allow a presumption of truth and a strong presumption of present or past utility. For the other school, their doctrine of original beliefs, and the ground upon which they regarded such beliefs as infallible, *viz.*, that they have a supernatural warrant, were formerly very excusable. And for my own part, I confess (though perhaps Mill was less superstitious) that, if it could be shown by the Psychological Method or otherwise that consciousness "in its pristine purity" testified to the externality of Matter, or the self-activity of Mind, or to the coexistence and conjunction of Ego and Non-Ego mutually determining and determined, it would be a great shock to my habitual sentiments, and for a time at least would perturb my views of many things. Similarly, I suppose, most people, whether reasonably or not, would in fact allow to beliefs thus accredited unusual authority.

As to the other supposition, that according to experientialists any belief traced to a natural origin must be false, it implies an extravagant misconception of the Psychological Method. Distinguishing, with the help of recent criticism, between the use of

that method within the science of mental phenomena where it is admitted to be applicable and harmless, and its use in examining the validity of beliefs: the latter employment, as I understand it, is chiefly twofold. First it may be explanatory, tending to show the real nature, meaning and content of a belief; and this, where the content is disputed, seems a necessary preliminary to testing the validity, but can hardly itself affect the truth of a belief; though it may alter its apparent bearing and interest, which is often quite as annoying. Secondly, the employment of the Psychological Method may be controversial. Suppose that the validity of a belief has been maintained on the ground that it is indissoluble, and therefore even if not valid at least necessary for us: this method enables us to conceive the solubility of beliefs whose terms are not separable by a direct effort. Or suppose someone maintains the validity of a belief on the ground that it is innate, connate, an original principle of human nature, a necessary condition of reason, or something else to the like effect: this method permits the reply that, whether the alleged belief be true or not, the grounds assigned cannot prove it to be true, because it can be shown not to be innate or original, or sometimes that in the circumstances it would have arisen even if it were false. These surely are good arguments as far as they go; but such arguments do not in general prove, and are not meant to prove, that the belief is invalid.

In some cases, however, it seems to me that the application of the Psychological Method does tend directly to invalidate beliefs, or at least to bring them into grave suspicion, namely, such as refer to special and changeable relations; of which the most important are moral beliefs. For all beliefs that can be shown to be products of experience are of course relative to the environment, and, supposing them true at any time, their trustworthiness from time to time must depend upon the permanence of those relations in the environment to which they correspond. Since, then, moral beliefs and sentiments are relative chiefly to the social environment; and since society, especially at certain periods, undergoes profound and rapid changes (relatively greater than those of the universe at large, or of the planet), it is to be expected that during such periods of social change the moral beliefs and sentiments of large sections of the community will lag behind and grow less trustworthy, being adapted to the state of things which is passing away, but only imperfectly to the present. Hence the revolution is dangerous not only to the weak, but also to the inflexible. In other cases, again, where the object of belief is transcendent (such as ghosts or their efficient causes), and not to be proved or disproved by direct means, the Psychological Method (or its sociological counterpart, the Historical) may at least raise so much suspicion as to shift the burden of proof. For if any belief is generally accepted, it rests of course with those who are dissatisfied with it to give their reasons: but if by

the Psychological or Historical Method the belief is shown to have originated in fancy, illusion, and superstition, it seems a fair demand that its supporters should re-establish it upon firmer grounds.

But these defensive remarks are growing into a digression: to return to Prof. Bowne's own method, the distillation of common sense. It does not seem certain that such a process, even if perfectly conducted, must at present lead us to the truth. Granted that in the long run the collective human mind may be expected to faithfully reflect the nature of things, it may as yet be far from doing so. And if the collective representation of the world is still only fragmentary and distorted, the result of a critical emendation and adjustment may be wholly chimerical. As our author observes, "every analogy of nature points to the view that our faculties are most trustworthy in their developed form": and similarly with common sense; it may still be at a very imperfect stage of development, far short of its ultimate enlightenment: and I hope it is so. Besides, common sense is not equally enlightened upon all subjects. No one would now think of constructing Zoology from an examination of common sense. That authority is not a polymath but a specialist, and must be consulted chiefly on its speciality; which, no doubt, is conduct and morals. Even there it is not a final authority; but it has at least reflected upon the subject long and seriously, however immethodically, and has been instructed by an infinity of experiments. But in Metaphysic there are no crucial experiments: hence in Theology we do not find the agreement that there is in morals; and outside Theology the reflections of common sense upon metaphysical questions are never prolonged and hardly serious, because error of opinion is not felt to be important. It is a primary caution for interpreting the dicta of common sense upon such matters, that its occasional exponent never understands what he is saying. He believes in the externality of bodies and in causation. But what does he mean by it? Here, then, the explanatory use of the Psychological Method may be recommended. Moreover, the collection of data upon which the comparison of common sense opinions is to be founded should be at least representatively exhaustive, that is, it should represent all types. Such a collection and collation is certainly very desirable; but, after all, the work that contained it would probably be not so much science as a museum. It is clear, again, that the satisfactory prosecution of this method requires the utmost impartiality both in collecting opinions and in comparing them.

These difficulties are inherent in the method, but there are also perhaps some shortcomings in Prof. Bowne's employment of it. One misses definiteness of reference, without which the citation of common sense seems of doubtful warranty. Definite reference may be either to the phraseology current in different countries and ages, or to the recorded opinions of men who, without being

much sophisticated or of a speculative turn, have been remarkable for good sense. Our author seldom cites either sort of witness, so that it is a relief when he turns to the known opinions of philosophers.

I have dwelt thus at length upon method partly because of its interest, partly because the actual contents of this book do not lend themselves to succinct treatment either by exposition or reply. There are more arguments in it than in almost any book of its size not mathematical; and since they are as a rule very tersely stated, and often fallacious, it would need another book nearly as large to do them justice. A certain thread of argument, however, runs throughout, and one or two passages are of principal importance to its continuity; so that should they upon trial prove weak, utter dissolution must ensue. It will be well to examine one of these, and thus at the same time give an example of the method.

Prof. Bowne finds that Being is activity; and that a Thing must be viewed as a concrete and definite principle of action. The common theory is, he says, that a plurality of things exists, which are independent of one another, and yet act upon one another, and by their interaction form the system of the universe. But these notions of independence and interaction are incompatible: for if two things are truly independent, how can one influence the other? "Neither coexistence nor contiguity in space throws any light upon interaction; and since interaction must be affirmed the only way out is to deny the independence of the plurality, and reduce it to a constant dependence, in some way, upon one all-embracing being, which is the unity of the many, and in whose unity an interacting plurality first becomes possible" (p. 126). But to this the reader naturally objects that the hypothesis of one all-embracing being is needless: it is enough to suppose things to be mutually dependent. The author states this objection, and proceeds to answer it. I give the statement and answer at length in his own words; and as a detailed criticism of it would take too much space, and would be needless in a scientific journal all whose readers judge for themselves, I merely indicate from stage to stage in brackets some of the difficulties that occur to me.

"Why not make them mutually dependent, so that the series of things A, B, C, &c., shall not depend on Alpha, but on one another? In this way each member of the system would exist only in connexion with the other members, but the system itself would be independent. . . . One manifest objection is that it seeks to make an independent out of a sum of dependents. A, B, C, &c., are severally dependent, but A + B + C + &c., is independent. But if A, B, C, &c., are distinct [*shifting ground*] ontological units, this is absurd. There is nothing in the sign of addition which is able to transform a dependent thing into an independent [*ignoratio elenchi*]. There must be some bond underlying that sign, and that bond is interaction. When two mathematical quantities are found to vary together, one must be made a function of the other, or both must be made a

function of some third quantity common to each. When a series of things vary together, it is equally impossible to regard them as absolute units [*false analogy*]. Some one thing must be independent, and all the rest must be in some sense functions of that one. As interacting, a state of each must imply a certain state of all; and this is impossible so long as there is not some being common to all [*petitio principii*]. We conclude, then, that the whole can never be reached by summing the parts, but that the parts must be viewed as phases of the whole" (pp. 126-7).

I had rather (to parody an old saying) a man should say I did not exist than that he should try to prove my existence by such an argument: but no doubt Being is indifferent to the ludicrous. Besides the fallacies above noted, the whole passage is an *ignoratio elenchi;* for the point to be proved was that the rejection of the notion of interdependence from the essence of particular things and the recognition of their mutual dependence, was insufficient to reconcile common sense to the notion of their interaction; but what the author sets himself to prove is the necessity of an independent universal. At an earlier stage of the argument there is another lapse of thought. He assumes that if the interaction of particular things is irreconcilable with their independence, one of these qualities must be wholly rejected from their nature: but is it not a better reconciliation to suppose that things are dependent upon one another or interactive in some respects, but not in all; *e.g.*, that they are mutually independent as to existence, so that the annihilation of one by another is impossible, but dependent in other ways, as with respect to position? Can that be a satisfactory reconciliation of common sense which sacrifices any one of its notions?

It must be confessed that the passage to which special attention has thus been drawn is every way an unfavourable specimen of our author's performance. He generally reasons much better: but if the reader shall think that the above argument is a crisis of the book, and shall condemn it there, the remaining arguments, however interesting and instructive as dialectical exercises, will have lost their interconnexion. The tendency of those arguments may be inferred from what we have seen: their most important conclusions are like the premisses of the majority of people who have been called upon to hear sermons. In the Introduction the name of Lotze is invoked to sanction them; but the interest of Lotze lies not in his conclusions, but in his method of treating every question. Prof. Bowne's style, too, is for the most part far better than in the above quotation, whose very grammar stumbles amid the confusion of its thought. Where the reasoning is good the style is very good; clear, direct, and energetic. On the whole the book should be a useful one: especially to any unsophisticated plain man of common sense who thinks his ideas of the universe are clear and consistent, and whom it will wholesomely disillusion; and to the experiential philosopher who contemplates a work on the same subject, and who will find here great variety of

objections and difficulties, by surmounting which he may set his own doctrines upon a desirable eminence.

CARVETH READ.

Der menschliche Wille vom Standpunkte der neueren Entwickelungstheorien ("Des Darwinismus"). Von G. H. SCHNEIDER, Verfasser des Werkes *Der thierische Wille.* Berlin: Dümmler, 1882. Pp. 498.

This work, a bare notice of which appeared in the last number of MIND, is a serious attempt to apply the doctrine of evolution to the phenomena of human volition. Herr Schneider is favourably known as the author of a volume on animal volition which was reviewed in this Journal (see No. XIX). He has been a wide and a careful observer of animal life, and has thoroughly assimilated the teaching of the great modern evolutionists. These qualifications eminently fitted him for the work of tracing the development of will throughout the scale of animal life. The same qualifications would lead one to expect an interesting and suggestive treatment of the more complex phenomena of action in the human species. For it is certain that the time has arrived for bringing to bear the doctrine of evolution on all sides of human psychology. The growth of the mind alike in its intellectual, emotional and volitional aspect can only be made clear and intelligible by help of the comparative method and of the well-grounded hypothesis that the history of the individual is in a manner determined by and a reflexion of the history of the species, or rather of the whole ascending series of species. The writings of Mr. Spencer and Mr. Darwin, together with those of younger evolutionists, as the essays of Mr. Grant Allen in the thorny region of æsthetics, and the work of Mr. Leslie Stephen in the no less difficult tract of ethics, have proved incontestably that human psychology is destined to receive valuable illumination from the new doctrine. And now a young German writer has added a solid piece of work in the psychology of volition. Herr Schneider has done much to establish the proposition that the growth of the individual will is inexplicable without a reference to ancestral history and inheritance. He appears, indeed, to claim a larger place for the play of instinct in human life than Mr. Spencer does. In this respect he is abreast with Prof. Preyer of Jena, whose work on the development of the infant mind was recently reviewed in this Journal (see MIND, No. XXVII). There is, however, a danger attending the first application of a new theory, namely, that it will be pressed too far, and forced to explain what it is really inadequate to explain. This danger, it may be said at once, is fully illustrated in the present volume. Herr Schneider is at his best when dealing with the simpler phenomena of human volition; when he comes to grapple with

the more complex facts, his interpretations often seem hasty and insufficient. Throughout, his treatment of the subject is characterised rather by novel and out-of-the-way observation and brilliant suggestion than by penetrating insight and exhaustive explanation. In the more ticklish problems of analysis he is apt to strike the reader as superficial or onesided. To say this, however, is only to say that even in the most ingenious hands the doctrine of evolution can only be made to yield a partial interpretation of the facts of human psychology. In trying to understand such problems as how we come to desire objects rather than the pleasures which they yield, how we acquire the power of postponing action and weighing motives, and how we form the habit of identifying for a time the happiness of another with the end most desirable for ourselves, we appear still to be thrown back on the older method of careful introspective analysis, aided by ample objective observation of the mental processes of others.

Herr Schneider's work opens with a section headed "General". This discusses first of all the nature of conscious or, as he prefers to call them, "psychical" actions in their relation to those which are purely physiological. Psychical actions are all those wnich are accompanied by subjective states. The most elementary psychical antecedents are impressions due to the immediate contact of the organism with outer things, in which the discriminative or intellectual and the emotional (pleasurable or painful) side are not as yet differentiated. The psychical antecedents are in every case real conditions of the action, the intervention of consciousness being regarded as a necessary stage in the evolution of life. It is, however, exceedingly difficult to determine the line of demarcation between psychical and purely physical actions. The so-called reflex actions, which the author subjects to a careful examination, really include both sorts. While the lower reflexes are clearly non-psychical, the higher ones, including all those "in which the stimulation as well as the movement enter into consciousness in any degree," such as coughing, sneezing, scratching one's self, blinking, are psychical. It may be added that the author extends the idea of reflex action by including along with psychical and physiological, purely mechanical processes. Any two mechanical phenomena having a causal relation constitute a mechanical reflex. This is clearly to regard the end of an action as nothing but the terminal phenomenon in a series of phenomena; and this is avowedly the author's view of purpose. All this seems, however, to confuse the region of the inorganic and the organic, and to empty physiological terms of their distinctive meaning. The peculiarity of the result reached in the case of physiological processes, namely, self-preservation, preservation of species, surely differentiates these sufficiently from mechanical movements. And the best way of describing the process appears to be by the analogy of consciously purposive actions, provided that we steer clear of the error that there is any conscious prevision

in the case. For the rest, while the author is quite right to insist on the fact that psychical phenomena accompany certain reflex actions, he has not shown how it is that the psychical element becomes a necessary co-operant condition in action as life evolves. The author proceeds to deal with the notion of mental inheritance, seeking to render it clearer by help of the idea of inherited "causal relations" between mental states. It is these relations which are inherited, not the states themselves. By this the writer seems to mean that no *intellectual* phenomena, images, notions, &c., can be transmitted. Perceptions of the individual are the necessary antecedent of all representative states; what inheritance does is to give to new perceptions the power of exciting feelings, and also to facilitate greatly the combination of intellectual states one with another. Among other examples of inherited relations or, as we are wont to call them, associations, the author cites the child's fear of a dark room or other cavity, which represents innumerable experiences of danger from wild animals. He rightly emphasises the fact that inherited feelings and impulses appear only at the stage of individual development which answers to that in which the race has had the corresponding experiences. Thus, because a very young child shows no fear of the dark, we cannot argue that this fear is not instinctive. He will certainly betray such a fear when from six to twelve years old if brought into a dark wood or a dark cave. This "general" section closes by an application of the principles of adaptation and natural selection to the phenomena of human action.

The second part is devoted to Instinctive Actions. These include all in which there is "a psychical striving towards the preservation of the species without consciousness of the end of this striving". Instinct is thus contrasted with consciously purposive *(zweckbewusste)* action. Instinctive actions are either Sensuous or Perceptual, according as a sensation or a perception is necessary to call forth the impulse. Since the absence of a conscious representation of the end is the differentia of instinct, and such end is a relative and variable idea, it follows that one and the same action may be called instinctive and consciously purposive or fully voluntary. Thus aiming at being rich without any thought of the utility of wealth in relation to individual and family preservation and wellbeing is a relatively instinctive action. A perfectly volitional act includes a consciousness of the ultimate end, namely, the preservation of the species. A chapter follows on sensuous instincts, which include all those reflexes in which there is a psychical concomitant, as well as other movements which are compound reflexes (such as sucking). The movements before birth, together with the first movements of the new-born child, are all regarded as sensuous instincts. There is in one place a passing reference to the accumulation of energy in the motor nerves and a consequent need of movement (p. 119); but

no use is made of the supposition that a movement might arise spontaneously or without the presence of a stimulus. The author shows considerable ingenuity in accounting for these early instincts. Thus he argues that the first inspiration is brought about by a sensation of cold and pain. Even the adult tends to draw in the breath quickly and energetically when suddenly exposed to cold or other painful sensation. This causal relation has been brought about by natural selection for the purpose of securing the first action of the breathing mechanism. This would account for the fact that no children without tactual sensibility survive birth. Besides the act of breathing, those of crying, sobbing, sucking, movements of the hand and lips in search of the breast, taking the finger and other objects into the mouth, and so on, are dealt with in the same interesting way. Herr Schneider further throws out striking suggestions as to the genesis of some of these early movements in the course of the evolution of species. Thus he thinks that the movement of sucking may have gradually arisen by a transformation of the licking movement of the lowest mammals. Besides these connate sensuous instincts, there are others which are acquired in the course of the individual life by practice and habit. Actions when rendered perfectly automatic by repetition are brought about wholly by tactual and muscular sensations, and without any aid from those representations of the several movements which were necessary conditions in the earlier stages of the acquisition. These sensations play an important part in all habitual movements, and, though often fugitive enough, serve to differentiate them from purely physiological movements. This chapter on sensuous instincts contains an elaborate discussion of the conditions of pleasure and pain. Herr Schneider seeks to define with precision the limits of the law that pleasure coincides with beneficial, pain with injurious effects. In this he follows closely, though apparently in ignorance of the fact, in the footsteps of Mr. Grant Allen. Pleasure is in all probability connected with a furthering, pain with a hindering of the process of life. But in order to understand what is fitted to further vital activity it is necessary to take into account the fixed inherited tendencies of the organism towards self-preservation. The discussion is throughout ingenious, and contains good criticisms of current theories. Yet it may be doubted whether the author has really done justice to the difficult problem which he here attacks. If dealt with at all in this work, it certainly should have been in a separate chapter, and not in the course of an exposition of a certain group of movements. Much the same may be said of another discussion interpolated into this chapter, namely, on the relation "of feeling to the sensations". By this the author means the relation of the emotional to the intellectual (discriminative) side of sensation. He argues with some force against Horwicz that feeling is not absolutely prior to discrimination, but that the simplest conceivable psychical condition is a

consciousness of transition from a state of rest to one of excitation. In this mental state the emotional and the intellectual side are not yet differentiated, although the former element is the more prominent. It is only in the higher stages of development that the objective (intellectual) and the subjective (emotional) sides are distinguishable. And what applies to the relation between feeling and sensuous discrimination, applies also to the relation between these and the sensuous impulse. At first they all three run together, and only gradually become differentiated. The place of the sensation and the impulse in the economy of the organism is thus conceived:—"The sensation is the connecting link *(Vermittelung)* between the partial peripheric influence and the raising of the collective life-process to a greater accumulation of energy, while the impulse guides this central excitation to definite single peripheral parts (muscles), and is the medium for bringing about these phenomena" (movements?) (p. 193). Here again, while we find much that is ingenious, we miss a full and masterful handling of the subject. More particularly we should have been glad of a fuller inquiry into the meaning of impulse *(Trieb)* on its subjective side.

Passing now to Perceptual Instincts, we find an interesting account of the early movements which are preceded by the discrimination of an object or by a perception. The action of reaching out and grasping an object is taken as the type of these movements, and the explanation of this shows that the author has been a careful observer of infant life. To anyone who has closely watched a child, or who will take the trouble to read an account of children's movements by a writer like Prof. Preyer or our author, it must be quite clear that the acts of stretching out the head, the body, and the hand are to a large extent independent of accident and trial, being definitely fixed by inherited dispositions. Imitative actions are brought under this head. They are perceptual in so far as they are supposed to follow immediately the perception of another's movement without the intervention of any representation of that movement in terms of muscular experience. Here, too, we have a pretty full treatment of expressional movements, though the author returns to the laws of expression in his final chapter. Herr Schneider appears to me to press the hypothesis of inheritance too far in this chapter. Thus he attempts solely by help of inherited association to account for the cry of the child. But the child not only cries when he sees a stranger, especially "a man with a great beard": he cries at all manner of strange sights and sounds; and it seems simpler to say that all strange impressions when sudden are apt to disturb and vex the mind. Still more doubtful is the author's theory of inherited sexual taste. He seeks to account for the youth's apparently capricious amatory feelings in the following way. The youth is affected by a maiden as like himself as possible physically and psychically. And the reason is that his ancestors

have in the main chosen this type, and with happy consequences, so that pleasurable associations with this kind of person will be inherited. Both the accuracy of the fact and the validity of the explanation may be doubted. Is it a fact that the majority of men chose mates as like themselves as possible? And if so, how did the early ancestors acquire the taste before any inherited pleasurable associations had been built up? Possibly the author means that the first selection of homologous mates was accidental, and favoured by natural selection, but he leaves his readers in the dark on this point. In this chapter, again, we have a long discussion of the relation of the perception to the feeling called up by it. The author seems to be making problems for himself when he asks how it is that a perception can call up a feeling, but not conversely a feeling a perception. He becomes perplexing when he discusses the relation of the feeling excited by a perception to the sensuous feeling which is its base. Altogether most of this passage, which is called forth by the views of Horwicz, is somewhat feeble, showing plainly enough that the author is not thoroughly familiar with the nicer problems of psychological analysis. He would probably have done better by leaving aside the views of Lotze, Wundt, and Horwicz on such subtle points as the relation of pleasure to stimulation, and the priority of the intellectual or of the emotional, and by confining himself to those more manageable questions in what may be called historical psychology, for which he has proved himself so well-fitted.

The third section treats of consciously purposive or perfectly voluntary actions. Here the author follows pretty closely in the steps of Mr. Herbert Spencer. He shows how the consciousness of end gradually evolves, beginning with the representation of the special direct result of the action, taking in more and more of the indirect and remote results, and ending in the representation of the all-comprehensive end. Unhappily there is again interposed here one of the unsatisfactory discussions of abstract points, namely, a chapter on the relation between feeling and intellectual and volitional states. These discussions are clearly digressions, having no business where they come, and serving greatly to obscure the course of the exposition; and they do not fully grapple with the difficulties of the subject. In the present instance, moreover, one must complain of misstatement. The author accuses not only Leibniz and Locke, but recent English writers (H. Spencer and A. Bain), of talking about feeling as though it were a *knowledge* of the good and bad, the useful and detrimental. The truth is, of course, the very reverse, namely, that English psychologists have drawn the sharpest distinction between the intellectual and the emotional element in mental phenomena. The perplexing phenomena of deliberation and choice are fairly treated, with a good deal of aid from Wundt's doctrine of apperception. Then there follows—why here one does not exactly see—a chapter on one-sided, unsuitable and abnormal actions, with

a pretty full account of the actions of hypnotised patients. It is interesting enough, but serves still further to give to the work a loose and unmethodical character. Then we are taken on to consider the moral aspects of the subject, the nature of good, and the rival claims of optimism and pessimism. Herr Schneider's treatment of ethical questions offers little that is new to readers of Mr. Herbert Spencer and Mr. Leslie Stephen. In some respects it leaves much to be desired. The conclusion that the ends of happiness and of the preservation of the species perfectly coincide, and that life as such secures enjoyment in its wake, needs a good deal more demonstration than Herr Schneider thinks it necessary to give. His tone reminds us much of that of the most sanguine of the English followers of the evolution-standard. This sanguineness of temperament comes out most clearly in the concluding remarks on education. The notion that the doctrine of inheritance will at once clear away all the difficulties of pædagogues, and show clearly how intellectual and moral training should shape itself, may be said to prove the confidence of an enthusiast. Herr Schneider has shown himself to be capable of thoroughly sound scientific remark. If he will only put away the temptation to resolve the subtleties of analytic psychology, and to give the world counsel as to the ends of conduct generally, and the true methods of teaching, he can easily accomplish something of enduring value in evolutional psychology. In any case we would venture to ask him in the future to keep these ends as distinct as possible one from the other.

JAMES SULLY.

VII.—NEW BOOKS.

[*These Notes do not exclude Critical Notices later on.*]

Studies in Philosophy, Ancient and Modern. By W. L. Courtney, M.A., Fellow of New College, Oxford, Author of "The Metaphysics of John Stuart Mill". London: Rivingtons, 1882. Pp. vii., 204.

The common feature of these Studies "is intended to be a vindication of the Kantian standpoint, as against popular English Philosophy on the one side, and later German Metaphysics on the other". There are two studies of ancient philosophy; in the first of them Parmenides is considered as a representative of "Ancient Idealism," in the second Epicurus as a representative of "Ancient Hedonism". The first of the essays that deal with modern philosophy is entitled "The Failure of Berkeley's Idealism". As Parmenides was an incomplete Idealist because "he did not predicate being of thought but thought of being," so Berkeley was an incomplete Idealist because "his Idealism is built on sensations rather than on reason". But in several ways he "tends towards a truer Idealism". The study of Berkeley is followed by a discussion of the various ways in which the word Cause has been used. After this come essays on "the New Psychology," and "the New Ethics". Mr. Courtney maintains that the problem of philosophy is still, after all the changes introduced by "the new Psychology," identical with the old problem, "Is Mind to be explained from the side of Matter, or Matter to be explained from the side of Mind?" (v.) The evolutionist view of ethics is essentially different from the older views, for it does not accept the distinction of ethics from all other sciences which was formerly allowed by every school of thought (vi.). In the next essay it is argued that "the Kantian explanation of experience remains untouched" by the psychology of evolution. But the *Critique* of *Pure Reason* is inconsistent with the *Critique of Practical Reason.* Can we with the Hegelians give up the Logic of Kant for the Ethics? It does not seem likely that this solution of the paradox of Kant will be accepted (viii.). As a philosophy of religion the Hegelian view presents difficulties. "Yet, even so, the attempt to make God the equivalent of 'the idea which runs through things,' though a device which is as old as Plato, is too noble to be either wholly fruitless or wholly false" (ix.).

The Concepts and Theories of Modern Physics. By J. B. Stallo. ("International Scientific Series," Vol XLII.) London: Kegan Paul, 1882. Pp. 313.

The object of the present investigation is "to inquire whether

or not the validity of the mechanical theory of the universe in its present form, and with its ordinary assumptions, is indeed absolute within the bounds of human intelligence". It is found that each of the four propositions "which, in conjunction with the principle of the conservation of both mass and motion, may be said to constitute the foundations of the atomo-mechanical theory" either comes into conflict with some requirement of this theory itself or is incapable of explaining laws of chemistry or physics that ought to be deduced from it. "Metaphysical thinking," which is defined as "an attempt to deduce the true nature of things from our concepts of them" has given rise to certain "structural fallacies of the intellect" (c. ix.). The mechanical theory exemplifies all these "radical errors of metaphysics". The fallacy "that things exist independently of and antecedently to their relations; that all relations are between absolute terms," has led to the theory of "the absolute finitude of the world," to "the reification of space," and to "modern transcendental geometry" (cc. xiii., xiv.). "Like all metaphysical theories, the atomo-mechanical theory has its cosmogonies." The nebular hypothesis is beset with difficulties both in "its general cosmogenetic," and in "its special Laplacean form" (c. xv.). It is concluded—that "the atomo-mechanical theory is not and cannot be, the true basis of modern physics". But Mr. Stallo points out that the denial of the atomic theory "does not imply the metaphysical thesis of the absolute continuity of matter"; nor does it imply the denial that all physical action is "in conformity with constant and uniform law" (c. xvi.).

The Ultimatum of Pessimism. An Ethical Study by James William Barlow, M.A., Fellow and Tutor of Trinity College, Dublin. London: Kegan Paul, 1882. Pp. 109.

The Ultimatum of Pessimism, "the pessimistic justification of life," is "the grotesque absurdity of what we may call the Blister or Poultice Theory of the Universe". But in their destructive polemic against the Positivist "theory of social eudemonism," the Pessimists have done good service. This theory, according to Hartmann, is the third and last stage of "the eudemonistic illusion"; the first stage being the belief that happiness is attainable by the individual "in life on earth as it exists at present," and the second the belief that it is attainable "in a transcendental life after death". Since "the Blister theory"—the theory of the unhappy Unconscious that creates a miserable world to get rid of a portion of its own unhappiness—is insufficient as a justification of life, we ought not to continue to exist, "if the pessimistic arguments are really sound and valid". "But, before destroying ourselves, it will be well, as a last chance, to take a look at the second stage of the eudemonistic illusion." It is found that even if we "take the system of materialism as obviously that which

apparently involves annihilation of conscious life by resolution of the bodily organism into its elements," a future life is possible. "If, now, the transcendental world can survive the shock of materialism, it is not likely to succumb before a more spiritual theory of the mind." "But it should never be forgotten that, the strength of our position here lying in our ignorance of the transcendental world, too much caution cannot be used if 'analogical reasoning' must be pressed into service for controversial purposes."

Spinoza: Four Essays by J. P. N. Land, Kuno Fischer, J. Van Vloten, and Ernest Renan. Edited by Prof. Knight, St. Andrews. London: Williams & Norgate, 1882. Pp. xiv., 170.

The first of these (translated) essays deals with Spinoza as a philosopher. The Editor in his introductory note draws attention to the fact that "Prof. Land has revised the translation of his Essay for this volume; and has added to it much new and important matter". The second paper is biographical. In the third, Spinoza is regarded as "the (glad) herald to mankind of the good news of its majority". M. Renan's well-known Address is chiefly a study of the personality of Spinoza.

Hamilton. By John Veitch, LL.D., Professor of Logic and Rhetoric in the University of Glasgow. Edinburgh and London: Blackwood, 1882. Pp. 268.

The first chapter (pp. 1-35) of this volume of "Blackwood's Philosophical Classics" contains a sketch of the life of Hamilton and a general view of his character as a philosopher. The rest of the book is an exposition of the distinctive doctrines of his philosophy. The author has "not attempted to discuss the Logic of Hamilton in this volume. There was not space to do it justice." He protests against the habit of "judging an author or determining his opinions by a formula called historical, which is to grasp all systems and fix the place of each". "Hamilton, above all men, deserves to be read, and needs to be studied before he is judged or rather caricatured." With regard to Mill's criticism, he remarks that "Mr. Mill may be strong in the region of the *axiomata media*, and the bearing of such principles on practice and life, but he is certainly weak where Hamilton was strong."

Essays in Philosophical Criticism. Edited by Andrew Seth and R. B. Haldane. With a Preface by Edward Caird. London: Longmans, 1883. Pp. 277.

"This volume, which is dedicated to the memory of the late Professor Green, consists of nine Essays by members of the Universities of Oxford, Cambridge, Edinburgh, and Glasgow. Its object is to show the bearing of the Critical Method, as it has been developed in Germany, to the questions which are at present at issue in the philosophical world, and, more especially, to elucidate the relation which, on the principles of this method, must exist between philosophy and science. The first two Essays by the Editors—'Philosophy as Criticism of Categories' and 'The Relation

of Philosophy to Science'—are in a manner introductory, and elucidate the general standpoint with special application, in the second Essay, to the notion of organic development as employed by science. The other Essays embrace a criticism of the conceptions of ordinary logic, of political economy, and of the Spencerian sociology. The Philosophy of History, the Philosophy of Art, and the ultimate value of the Historical Method are treated in separate Essays; and the possibility of a Philosophy of Religion is also discussed in connexion with modern Pessimism and Comte's religious theory."

The Stoics as Teachers. An Essay on the Influence of the teaching of Stoicism on the Civilisation of the early Roman Empire, being the Hare Prize Essay for 1881. By C. H. Herford, B.A., Trinity College, Cambridge. Cambridge: Johnson, 1882. Pp. 99.

Mr. Herford discusses the Influence of (1) the Stoic Logic, (2) the Stoic study of Nature, (3) the Stoic Ethics. Under the last head the general social influence of Stoicism is first considered; then its influence on the Roman law is traced "in a threefold application of what in that system is meant by reason"; lastly the "positive legislation" that was determined by the principles of Stoicism is discussed. It is decided that "the positive legislation of Marcus betrays but too faithfully the defects of Stoicism as a social and civilising power".

Attempts at Truth. By St. George Stock. London: Trübner, 1882. Pp. 248.

The subject of about a third of these Essays is Spiritualism, which Mr. Stock regards as "a new religion," on the ground that it "has been able by dint of miracle to establish a belief touching man's destiny" (p. 137). The principal subjects otherwise discussed in the volume are Ethics, Theism, the Idealism of Berkeley, the writings of Mr. Charles Bray.

The Philosophy of the Upanishads and Ancient Indian Metaphysics, as exhibited in a series of articles contributed to the "Calcutta Review". By Archibald Edward Gough, M.A., Lincoln College, Oxford, Principal of the Calcutta Madrasa. ("Trübner's Oriental Series".) London: Trübner, 1882. Pp. xxiii., 268.

This work on Indian philosophy is not a reprint but a new work, although articles contributed to the *Calcutta Review* have been used in preparing it. Mr. Gough has given translations of several of the Upanishads together with "extracts from the works of the Indian schoolmen," and especially of Śankara, "the greatest of the expositors of the philosophy of the Upanishads". "The term Upanishad imports mystic teaching, and the synonymous term Vedānta means a final instalment of the Veda." It is in one of the hymns of the Rigveda "that is first suggested the primitive type of Indian thought, the thesis of all the Upanishads, *viz.*, the emanation of the world and of all the forms of life that successively people it, out of the sole reality,

the self that permeates and vitalises all things, through the agency of the unreality that overspreads it, the self-feigned fiction, the cosmical illusion, Māyā" (c. i., p. 15). During the period in which philosophy began in India, the Aryan race derived from the indigenes the doctrine of metempsychosis, which is not found in the Veda. "The sum and substance, it may almost be said, of Indian philosophy is from first to last the misery of metempsychosis, and the mode of extrication from it" (c. i., p. 20). Release from metempsychosis is attained by recognition of the impersonal self (Ātman or Brahman), as the only reality, with which the sage becomes identified (c. iii.). The mode of arriving at knowledge of the self has not been left to the exercise of the individual intellect, but has been revealed by gods and semi-divine teachers (c. iv.). The primitive thesis of Indian philosophy is the doctrine of the impersonal self; this doctrine, in its developed form, is known as the Vedāntic system. The primitive antithesis is the doctrine of the Buddhists that everything proceeds from nothingness and returns to it (c. vii.). The Sānkhya philosophy, said to have been founded by Kapila, affirms that the world has a real principle of emanation, Prakṛiti, and that there is a plurality of Selves or Purushas. Colebrooke and many other Orientalists have believed that the doctrine of Māyā is comparatively modern. This is an error which has its origin in the acceptance of a polemical statement of an opponent of the Vedāntins who tried to show that the primitive Vedānta and the doctrine of the Sānkhyas are not in contradiction. But, as a matter of fact, "in the very beginning of Indian philosophy, in the teaching of the Upanishads no less than in the teaching of the Vedantic schoolmen, the world is an illusion. . . . The one self in all souls is the only true being" (c. ix.).

Buddha: His Life, his Doctrine, his Order. By Dr. Hermann Oldenberg, Professor at the University of Berlin, &c. Translated from the German by William Hoey, M.A., D.Lit., &c. London: Williams & Norgate, 1882. Pp. viii., 454.

"Dr. Oldenberg has in the work now translated successfully demolished the sceptical theory of a solar Buddha, put forward by M. Senart. He has sifted the legendary elements of Buddhist tradition, and has given the reliable residuum of facts concerning Buddha's life: he has examined the original teaching of Buddha, shown that the cardinal tenets of the pessimism which he preached are 'the truth of suffering and the truth of the deliverance from suffering': he has expounded the ontology of Buddhism and placed the Nirvâna in a true light. To do this he has gone to the roots of Buddhism in pre-Buddhist Brahmanism: and he has given Orientalists the original authorities for his views of Buddhist dogmatics in excursus at the end of his work."

Schelling's Transcendental Idealism. A Critical Exposition by John Watson, LL.D., F.R.S.C., Professor of Mental and Moral Philosophy, Queen's University, Kingston, Canada. Chicago: Griggs (London: Trübner), 1882. Pp. 251.

The second-published volume of the series of "German Philosophical Classics for English Readers and Students" (the first noticed in MIND XXVIII., 604). After dealing, in three chapters, with the Philosophy of Kant, Earlier Philosophy of Fichte, and Schelling's earlier Treatises, the author in four chapters (Problem of Transcendental Idealism, Theoretical Philosophy, Practical Philosophy, Teleology and Art) analyses the *Transcendental Realism*, criticises the System of Identity and summarises Schelling's Later Philosophy in two chapters more, and then concludes with some remarks on the relation of Schelling's philosophy as a whole to that of Kant and to the thought of the present day. "Schelling erred by taking Kant too literally and neglecting the spirit of his philosophy. . . . Hegel in relieving the critical philosophy of the beggarly elements clinging to it and allowing it to rise up to the higher zones of spirit, is the true follower of Kant."

Science and Sentiment, with other Papers, chiefly Philosophical. By NOAH PORTER, D.D., LL.D., President of Yale College. New York: Scribners, 1882. Pp. 506.

The essays and lectures contained in this volume are, as the author says, "philosophical in their themes, but not severely philosophical in their mode of treatment". Most of them are attacks on those modern philosophers and "scientists" whose tendencies are regarded by Dr. Porter as "dangerous". A very indistinct and often inaccurate idea of the doctrines of J. S. Mill and other writers is conveyed in a very diffuse style. Dr. Porter calls his own views "Christian philosophy"; but he remarks that "the distinctive principles" of this philosophy "have been held by not a few men who did not accept Christianity as historically true or in any sense as supernatural. Socrates, Plato, Marcus Antoninus, Theodore Parker, Francis Newman, are by no means isolated examples". In the first of these essays ("Science and Sentiment"), from the facts that science has its origin in sentiment, and that sentiment "furnishes and shapes the ends of science," it is inferred that "Science should often recognise in Sentiment an important element and *datum* of proof". The next essay is "a Plea for the Science of Man," who is "now in danger of being eliminated out of the Kosmos". In a paper on "Force, Law, and Design," Dr. Porter undertakes to prove that the existence of laws of nature implies design in nature. He argues in the last two papers in the volume that the influence of Kant has on the whole been favourable to theology ("The Kantian Centennial"), and that "increased catholicity, or, it may be, indifference of Christian believers in respect to theological definitions and controversies is not necessarily an indication of diminished loyalty to Christian truth" ("The Collapse of Faith").

The Student's Handbook of Philosophy.—Psychology. By B. F. Cocker, D.D., LL.D., Professor of Psychology, Speculative Philosophy and Philosophy of Religion in the University of Michigan, U.S.A.; Author of "Christianity and Greek Philosophy," and "The Theistic Conception of the World". London: Hodder and Stoughton, 1882. Pp. 200.

Empirical and Rational Psychology, embracing Cognitions, Feelings, and Volitions. By A. Schuyler, LL.D., President of Baldwin University, Author of "Principles of Logic," and a series of Mathematical Works. New York: Van Antwerp, Bragg & Co., 1882. Pp. x., 484.

The first of these books is "one of a series of 'Handbooks of Philosophy' designed to embrace Psychology, Logic, Ontology, and Philosophy of Religion". It is compiled from the works of various authors to whom references are given at the end of each section. The philosophers quoted as authorities are of different schools, but an attempt is made in the book to preserve a certain consistency of doctrine. "The science of mind (Psychology) must be placed at the commencement of the philosophic system, not simply as a preliminary discipline but as a fundamental part of philosophy." After "Prolegomena" (pp. 1-19) and "Methodology" (pp. 20-40), division is made of Psychology into "phenomenal" and "dynamical" and the division is carried out as regards Intellect from p. 67 to p. 191, Intellectual "Consciousness" being first treated generally from p. 48 to p. 66. "Sensibility" and "Will" are each disposed of in *four* pp. at the end.

The divisions of Dr. Schuyler's book are—Part I. Cognition and the Intellect; (1) Acquisition, (2) Representation, (3) Elaboration (pp. 19-413). Part II. Feeling and the Sensibility (pp. 417-460). Part III. Volition and the Will (pp. 463-484). In Part I., the section on Elaboration is turned into a treatise on Logic (pp. 240-413). In Part II. the Feelings are classed as "physical, vital, and psychical". Part III. contains an argument in favour of the doctrine of Free-will.

Die Religion des Geistes. Von Eduard von Hartmann. Berlin: Duncker (C. Heymons), 1882. Pp. xii., 328.

The last work of the author, *Das religiöse Bewusstsein der Menschheit im Stufengang seiner Entwickelung* (Mind XXVI., 288), and the present work "are related to one another as the historical and the systematic part of a philosophy of religion". The present volume begins with "an analysis, as exact and impartial as possible, of the religious consciousness". It is shown in this first part ("The Psychology of Religion") that the religious sentiment has an intellectual, an emotional and a volitional element. Religion must have an object, and its object must be regarded as superior to man; this is seen in the apparently exceptional case of Buddhism, for non-being is regarded by the Buddhists as the ground and the final cause of all that exists.

Religion "in the truest sense," however, is found in feeling. But without the impulse to realise objectively something which the religious consciousness regards as an end, religion in the full sense of the term could not exist. The intellectual and emotional elements in religion are to be estimated according to the kind of "religious will" they produce. Just as religion considered as a belief of man has three aspects, so it has three corresponding aspects when it is regarded as a revelation from God. But all these aspects are aspects of a process which is in reality a unity. In the second part of the book ("The Metaphysics of Religion") we find that the "concrete monism" of the author is "the synthesis of the one-sided truths of theism" and "abstract monism". The religious consciousness postulates "eudemonological pessimism" and "teleological optimism". Abstract monism possesses only the first character of a religious view of the world, theism only the second. The last part of the book ("The Ethics of Religion") shows how, according to the view that has been developed, "deliverance from evil" is possible both for the individual and for the sum of things. The result of the greatest possible development of the religious consciousness would be that religion should no longer need expression in symbols or in churches. Although the triumph of "the religion of the immanent spirit" will never be complete, yet religious progress will constantly bring us nearer to this end.

Anti-Savarese. Von ANTON GÜNTHER. Herausgegeben mit einem Anhange von PETER KNOODT. Wien: Braumüller, 1883. Pp. xii., 318.

This posthumous work was intended as a reply to a criticism of Günther's doctrines that appeared in an Introduction to the Patristic philosophy, by Savarese, published at Naples in 1856. Since the brevity of the exposition makes it difficult to understand "for those who have not read Günther's writings," the Editor, who has already written a biography of Günther, explains the essential parts of Günther's system of philosophy in an Appendix which is more than twice as long as the work itself. The points dwelt on are: "the theory of Self-consciousness, the doctrine of the Categories, Dualism, Man as synthesis of spirit and nature, the Trinity, World-idea as the Non-ego of Godhead, Creation" (p. v.).

JOH. FRIEDR. HERBART'S *Sämmtliche Werke.* In chronologischer Reihenfolge, herausgegeben von KARL KEHRBACH. Erster Band. Mit einer lithographirten Tafel. Leipzig: Veit, 1882. Pp. lxxxiv., 428.

The first volume of a new edition of Herbart's Collected Works, the previous edition of Hartenstein (1851-3) being out of print. The new edition, running to twelve volumes to be issued in four or five years, will not only include all separate pieces published after the appearance of Hartenstein's edition, but will

collect for the first time a number of valuable critiques contributed by Herbart to different periodicals, will add some papers not before published, chiefly paedagogical, and will besides give in Supplements a quantity of matter, not from Herbart's own hand, that throws light on his mental development or has some biographical interest. In the present volume his earliest philosophical and educational writings, to the year 1805, are given in the chronological order to be maintained throughout. The volume opens with Joh. Smidt's "Recollections of J. F. Herbart" (pp. v.-xxvii.), written out at Hartenstein's instance in 1842, but hardly used by him, because of the free references to people then living.

Kurze kritische Darstellung der Anfänge und Entwickelung der Utilitarischen Moralphilosophie in England. Von Friedr. W. Horny, Bacc. Art. Cantab. Inaugural-Dissertation zur Erlangung der Doctorwürde eingereicht bei der philosophischen Facultät der Universität Leipzig. Leipzig: Hundertstund u. Pries, 1881. Pp. 74.

The general result of this examination of English Utilitarianism is that "the harmony of all interests is only an illusion"; the first condition of all true morality is self-denial. The author divides the history of Utilitarianism into four periods, (1) Hobbes to Locke, (2) Locke to Hume, (3) Hume to Bentham, (4) Bentham to J. S. Mill. Lastly, the views of Mr. H. Sidgwick are discussed.

Grundlegung der reinen Logik. Ein Beitrag zur Lösung der logischen Frage, von Dr. Georg Neudecker, Privatdocent der Philosophie an der Universität Würzburg. Würzburg: Stuber, 1882. Pp. 80.

Dr. Neudecker regards the modern systems of Logic as built on rotten foundations. At the same time he does not agree with those who think the Aristotelian logic will triumph over all recent systems. Logic, according to his view, must be founded on the theory of knowledge. The distinctive doctrine of his theory of knowledge is that certainty is found in "the immediate union of thought and being," and that this union takes place in the *ego* as its form. "The *ego* is the beginning of knowledge because only in its form are thought and being immediately united" (p. 18).

Ludwig Feuerbach's Philosophie, die Naturforschung und die philosophische Kritik der Gegenwart. Von Albrecht Rau. Leipzig: Barth, 1882. Pp. 249.

A short account of Feuerbach's philosophical and literary activity (pp. 1-21) is followed by discussions of the criticism to which his views have been subjected and of his relation to other philosophers. The author thinks that, although philosophy seems to have emancipated itself from theology, the emancipation is not yet complete. He has prefixed to his book a passage from Schopenhauer in which this idea is expressed in a characteristic manner.

Die Grundlagen der Kant'schen Erkenntnisstheorie. Eine Einführung in die "Kritik der reinen Vernunft". Von Dr. Wilhelm Münz. Breslau: Koebner, 1882. Pp. 78.

For the solution of the problem of the *Kritik* it was necessary that Kant should put to himself the questions, "How is perception possible?" "How is representation possible?" "May not our knowledge be an illusion?" But besides making the assumptions that he was compelled to make by the conditions of his problem, he made others that were accepted by him from preceding philosophy. These are of three kinds, (1) logical, (2) psychological, (3) metaphysical. If we return to Kant it must not be to his contested assumptions, but only to his fundamental idea "that there is a subjective, ideal element as well as an objective, real element in our representations, that our intuition of the world is a product of two factors, of the mind and of things". Philosophy must seek in science and especially in physiology the answer to the question, how is the subjective element related to the objective element in our representations.

Studien über die Association der Vorstellungen. Von Dr S. Stricker, o.ö. Professor an der k.k. Universität in Wien. Mit einer Abbildung in Lichtdruck. Wien: Braumüller, 1883. Pp. 95.

The conclusion that is drawn in the last of these Studies from the results of those that precede it is, that in all intense thought we consider whether that which we think is true or not; that this is so even in thinking of works of art. We have no criterion of the truth of our impressions but memory. Of the causal connexion of our representations "we have no criterion but our own feeling of satisfaction". Taken along with the explanations that are given, these propositions no longer seem so paradoxical as at first. But the interest of these studies is not entirely in the conclusions they lead to; the account that is given of various kinds of association is very clear and is interesting in itself. In the first of the series the doctrine is maintained that our ideas of (pure or empty) words and of musical notes are the products of motor impulses to the muscles of the larynx; they are merely suggested by auditory impressions. The result of a discussion of Kant's assertion that we cannot imagine space to become non-existent is, that Kant has here expressed in another form the psychological observation already made by Berkeley that ideas of extension and of colour are inseparable. The reason why we cannot get rid of the idea of space is that the organ of sight is never, so long as consciousness is present, entirely inactive; we are always receiving impressions of colour. (ix. "The Necessity of the idea of Space.") In other Studies the origin of the idea of space and of its dimensions is discussed.

Geschichte der deutschen Philosophie seit Kant. Dictate aus den Vorlesungen von Hermann Lotze. Leipzig: Hirzel, 1882. Pp. 111.

The fourth of the series of Lotze's paragraphs for dictation in lecture, now being published by Prof. E. Rehnisch. The Introduction (1-11) covers the ground from Descartes to Hume, and the exposition is then given in six chapters: Kant (11-36); Fichte, after Reinhold (36-49); Schelling (49-59); Hegel and School (59-74); Jacobi, Fries and others to Schopenhauer (74-87); Herbart (87-101). An Appendix gives a complete list of the courses of Lectures announced and delivered by Lotze throughout his academic career from 1839 to 1881.

L'Evoluzionismo di Erberto Spencer. Esposizione critica di Giovanni Cerca, Dottore in filosofia e lettere. Verona e Padova: Drucker e Tedeschi, 1883. Pp. 196.

In this volume Dr. Cerca has given a very clear and full account of the philosophy of evolution. The value of his exposition is increased by references to earlier writers who have contributed suggestions that find their place in a philosophical view of science, and to the work of students of special departments of science who have recently developed the theory of evolution in some particular direction or verified some portion of it. Mr. Spencer is regarded as the first thinker who has been successful in the attempt to construct a scientific philosophy. But philosophy must be, as G. H. Lewes has shown, "an empirical metaphysic," and there is a metempirical element in Mr. Spencer's system. The basis of all "the Spencerian metempiric" is the identification of an unknowable force with the unknowable absolute (c. v.) The principle of the persistence of force is "an illusory symbolical conception". The doctrine of the first part of *First Principles* has the merit of separating the knowable from the unknowable; its defect is that, instead of making the separation of the fields of religion and science complete, it regards the unknowable as common ground. But the conception of the unknowable absolute "is a just conception only in the field of religion, not in that of science and philosophy". "The philosophical theories of Spencer acquire their full value only when they are liberated from that conception taken from religion" (c. iii.) The philosophy of evolution, deprived of its metempiric, is not a monistic system, for it recognises the relativity of knowledge and confines itself to phenomena. In this it agrees with Neo-Kantianism and with Positivism, of which systems it is the necessary completion. Like the first of them it is critical and like the second it is scientific; it is distinguished from both by having a synthetic principle, the law of evolution, which combines the results of the special sciences in one generalisation.

Thomas Whittaker.

VIII.—CORRESPONDENCE.

MR. T. DAVIDSON ON FATHER PESCH.

In MIND XXVII. (pp. 424-427) there appears a review of the *Institutiones Philosophiæ Naturalis* of Tilmannus Pesch, S.J., from the pen of Mr. Thomas Davidson. The review in question contains many inaccuracies and serious mis-statements of facts, the more important of which I may perhaps be allowed to point out. Mr. Davidson first relates the causes that eventually resulted in the Encyclical *Aeterni Patris*, and then proceeds to criticise the book which he believes to be intimately connected with the purpose of the Encyclical. I begin with his second point.

I. "Natural Philosophy as understood by our author . . . sets out by assuming the universal principles of reason, and then endeavours, by means of these, to enter into the being of things. . . . *The author makes no attempt to justify this procedure except by calling the views of those who deny its validity plagues or pestilent poisons . . . impious, atheistical, and so on.*" [The italics throughout are not Mr. Davidson's.] Now this last statement is contrary to fact; for (1) at p. 6, F. Pesch introduces the question of procedure; the first *thesis* in the book (pp. 8-12) seriously and directly discusses its validity, where four distinct arguments are advanced to establish it [α]. (2) The views of adversaries are nowhere in this context called "impious, atheistical, and so on." [β] Something quite different occurs at p. 10; and (3) the instances alleged of "*pestis*," p. 4; and "*pestiferum venenum*," p. 9, can in no sense be taken as an intended justification.

II. It is next stated that, "The 'universal principles of reason' which he (F. Pesch) adopts, seem to be the existence of a God . . . the infallibility of the Pope, the authority of Thomas Aquinas, and the impiety of modern physicists and philosophers, who, trusting in their own reason venture to dispute any of these principles". Now, that such should *seem* to be the case to Mr. Davidson is a psychological fact it would be impossible for me to deny. I confine myself then to the objective statement that the imputation is entirely false. And these are the proofs :—

In regard of the "infallibility of the Pope" (for the "existence of a God" will be touched upon later). Now, in the treatise itself (pp. 1-729), no Pope is, I believe, ever mentioned anywhere; and certainly no argument is drawn directly or indirectly from his authority. True, the Pope is mentioned three times in the Prefaces (pp. vii.-xvii.), but no "universal principle" regarding his authority is in any sense whatever laid down. [γ]

As regards the "authority of Thomas Aquinas". It is a principle admitted in all existing schools of Catholic philosophy, that, as far as a man follows the authority of St. Thomas Aquinas or of any one else, he is essentially not a philosopher. St. Thomas taught as much when he wrote in the first question of his greatest work, 'locus ab auctoritate quæ fundatur super ratione humanâ est infirmissimus'. (*Sum: Theol:* I. q. i. a. 8, ad 2dum). And Cardinal Zigliara in his much used text-book (Vol. i. p. 270) writes "Fateor, imo glorior me juvari doctrinis Ss. Augustini et Thomæ, sed hoc ideo, quia eas serio et diutius perpensas *mea ratio* veras deprehendit". Now, *à priori*, F. Pesch could not have been ignorant of what every beginner in philosophy hears in his earliest lessons. [δ] Further, *à posteriori*, the facts are against Mr. Davidson. For F. Pesch damages his principle considerably, if he ever held it, by deserting St. Thomas at p. 570, and seems quite ready to have left him at p. 454. Unquestionably, however, St. Thomas is quoted, one way or another, hundreds of times, and with admirable aptness and richness of erudition, but in no case is his

authority an element in an argument. For he is either quoted *historically*, as having held a certain doctrine (as at pp. 90, 120, 240, 264); or because of the *clearness*, or *propriety* of his exposition (pp. 96-98, 186, 211); or as agreeing with the doctrine stated or inferred (pp. iii. 158, 458, 603), or as stating a principle which commends itself (pp. 603, 605). Hence the phrases used,—"*ut ait S. Thomas*"; "*scite S. Thomas*"; "*Id ipsum S. Thomas, quare rectè*". [ε]

With regard to the last supposed principle,—"the impiety of modern physicists and philosophers who, trusting to their own reason, venture to dispute any of these principles," it is to be remarked (1) that no such connexion of ideas occurs in the book; (2) that no modification of it occurs as a "universal principle"; (3) that, on the contrary, for modern physicists as such, and as a body, F. Pesch has no small praise (p. 436). Their *consensus* is for him a principle of argument (p. 188). Their facts are his groundwork (p. 696). He calls them "*viri doctissimi, peritissimi*" (pp. 589, 624). [ζ]

Still Mr. Davidson's imputation of principles is not without some attempt at proof. This proof is taken from pp. ix. x. xi. of the preface. The character of this proof passes beyond the limit of logical qualification, it is simply painful. [η] It is to be noted therefore that the proof is taken solely from the Preface. This Preface is not an introduction, but quite extrinsic to the work. No important demonstration is intended, it is merely a reasonable discourse. It even precedes the two *Indices*. In it the author states the purpose of his work. He further states that he has chosen to follow in general the method of treatment marked out by St. Thomas. He adds the reason for so doing in the terms of Pope Leo, whose words for himself and for those to whom particularly that preface is addressed, are most weighty. Just so much and no more is the sense of the Preface in this matter. But even supposing the Preface to contain an announcement of "principles,"—the 729 pages that follow substantially belie the 3 pages from which Mr. Davidson detaches several sentences. [θ]

III. Further on we read, "the work before us . . . is a *mere attempt to justify intellectual authority* such as the Catholic Church pretends to possess" *(ib.)*. Such an attempt in a work like the present would certainly indicate an unsound mind. But, in point of fact, the question of such justification never occurs in any sense whatever in the 729 pages of the book; and putting aside the probable arguments from a *consensus*, and the mention of facts vouched for by some authority (as at pp. 514, 517, 715), there is no argument from authority in the whole treatise. [ι]

IV. Attention is called to "two principles which vitiate the book from beginning to end; first, the admission of authority in thought,—secondly the use of the hypothesis of an omnipotent God" (p. 426). Now with regard to the former, it is simply contrary to fact; for in the treatise in question, authority in thought is not admitted except in the sense explained just above. And with regard to the use of the hypothesis of an omnipotent God, I remark that the substantial work of the treatise is represented by the 68 *Theses* of the first Index (pp. xix.-xxiii.); the last two of which need not here be taken into account. [κ] Analyses of the character of the demonstration by which the remaining 66 are established gives the result, that there are 196 arguments (or thereabouts) in which this hypothesis *forms no part*, and 24 in which it is used. It is of course true that, outside of these formal and carefully elaborated arguments, much use is made of this "hypothesis," as it is termed; but it is so employed as never to vitiate the demonstration. For in the very few instances where it is a capital premiss, it is rightly supposed to be granted by those for whom the particular thesis or proof is intended (as at pp. 52, 492, 512-22). If it occurs elsewhere, it is either historically as part of some theory men-

tioned (p. 497); or to show the point of contact between the doctrine of God, and the subject directly and properly under consideration (as in the corollaries and scholia, *passim*); or with special explanation (pp. 401, 458). If it is introduced in the answer to a difficulty, almost without exception the reason is that it has already formed an express element of the difficulty. As to the use of this hypothesis "rendering philosophy impossible," I remark, that it cannot have this result unless the existence and attributes of God are in no way cognisable by the unaided light of reason. Because if God be known by the reflection (or intuition!) of mind, the Divinity is thereby Itself an object of philosophy. [λ]

And now let us turn to the historical portion of Mr. Davidson's notice.

I. At p. 424, we read, "More than half a century ago. . . . the Jesuits . . . were trying to force on the Church a kind of materialism (*i.e.*, sensism) after the manner of Condillac". This is quite inaccurate. Sensism makes no essential difference between sense and intellect. The latter, at the best, is but a higher mode of the former. The Jesuit school, however, and in particular the Roman College, has always taught that these two operations of the human subject are essentially different; the one being organic, and the other inorganic, the latter moreover being in no sense a transformation or modification of the former. This is *not* sensism, and this the Jesuits have always taught. [μ]

II. It is stated (pp. 424-5) that "Leo XIII. could not restore the ancient Thomism, because *his hands were tied* by a decree of the Congregation of the Index which had declared Rosmini's words *free from censure*". Now (1) The said Congregation never gave the sentence "nihil censurâ dignum," [ν] but "dimittantur". This "dimittantur" is by no means an approval, as the Congregation itself with the express confirmation of Leo XIII. has recently declared. [ξ] (2) As it is quite certain that a judgment of the Congregation of the Index is held to be of its own nature reversible by the Pope, the Pope's hands were *not* tied. [ο]

III. At p. 424, the Jesuits are said to have applied to Leo XIII. for a rehabilitation of pure Thomism against the improved Thomism of Rosmini. This statement is strangely at variance with facts. (1) Subsequent to the *Aeterni Patris* a radical change of professors and a corresponding change in the character of the teaching was made at the Gregorian University (the Roman College of old), the Thomism of the Jesuit tradition being supplanted by a Thomism more according to the Dominican tradition. [π] (2) The eminent Jesuit professor, now Cardinal, Franzelin, was in no way consulted on the subject of this Encyclical. (3) A distinguished Jesuit professor of the old *régime* at the Roman College and personal friend of the writer, knows nothing whatever of the alleged application. [ρ] (4) Not so much the Jesuits, but the bishops and professors of the Catholic Church, *en masse*, have expressed their admiration of, and their rational obedience to, this act of the Pope. [σ] (5) His Eminence Cardinal Pecci, brother of Pope Leo, in a communication to the writer of this reply, relegates the imputation in question to the category of 'quisquiliæ'. [τ]

IV. Finally the Jesuits are said, after the Encyclical, to have "at once begun to flood the world with books, *professing to be* 'secundum principia S. Thomæ Aquinatis,' but *really* emphasising views that are often quite as much at variance with those of St. Thomas as with those of Rosmini, against which they were directed" (p. 435). This sentence is sufficiently vague and general; but its clear charge of duplicity I simply deny. [υ] Then as to the assertion that Rosmini is the adversary really, though covertly, aimed at, I ask for a single passage in support of the statement. [φ]

In a note at the foot of p. 426, attention is called to the fact that, under the names of H. Spencer and G. H. Lewes, one work only is mentioned by F. Pesch, and it is there clearly implied that he is ignorant of the rest.

The inference is as uncalled for as it is incorrect. "The fact is" (these are the words of F. Pesch to the present writer) "I have read and studied the works of Spencer very attentively and quoted them as far as I judged convenient for the whole intent of my work. As for Lewes, I know that he has written, besides the *History of Philosophy*, also other works." [χ]

Other matters for want of space must be passed over in silence.

St. Bernard's Seminary, Solihull. H. T. Parkinson.

In appending a few notes to this 'Reply,' which with the author's permission I have been allowed to see, I am requested by the Editor of Mind to be very brief, and I shall try to be so, although I am thus compelled to omit much that I should like to say.

[α] This thesis lays down that empiricism (by which the author means sensism) is *(a)* without foundation, *(b)* self-contradictory, *(c)* fraught with the most fatal consequences to science and life, and *(d)* physically repugnant to man. Even if the author proved this, *which he does not*, except in the way I have said (see below), it surely would not in the smallest degree follow that "Natural Philosophy is the science considering natural bodies, as subject to metaphysical reasons," or "The science of physical things through metaphysical causes". (Reasons = Causes!) Besides Metaphysics and Physics, F. Pesch acknowledges the existence of Logic, Ethics and Mathematics, and indeed places Metaphysics on the same line with Physics and Mathematics as a branch of real science (p. 1). Why then, should Physics be reduced to metaphysical causes, rather than *vice versa*, or rather than to mathematical causes? I may remark that the above definition precedes the thesis in question by two pages, and is in no way dependent upon, or justified by it.

[β] I have not said that all these terms, or any of them, were used "in the context". But even in this context empiricism is spoken of in these terms, "Quæ *pestis* magnam partem doctorum hominum *veneno* infecit (p. 8); and on p. 4, among the "causes of this recent pest," "mores corruptela depravati" holds the first place.

[γ] The principles named "seem" to me to be the principles of the book, because I can nowhere find any others stated. I should indeed be glad to find out what are the principles "according to" which the book is written. If it is taken for granted that the Pope is "ille omnibus Christiani orbis populis a Deo O.M. præstitutus Doctor et Magister," what difference does it make how seldom he is mentioned? It is true that "no 'universal principle' *regarding* his authority is anywhere laid down"; nor have I said anything to the contrary; but his authority itself is *used* as a universal principle. What the authority of the Pope declares to be contrary to the Christian revelation, is and must be a principle and criterion of truth in all Catholic philosophy, and it is utterly vain to attempt to deny this. F. Pesch's whole doctrine of creation has really no other basis than the authority of the Pope "illius omnibus Christiani orbis populis a Deo O.M. præstituti Doctoris et Magistri". That this authority is not cited, is an utterly indifferent matter (cf. next note and the *Syllabus*).

[δ] It is unfortunate that some people frequently forget their earliest lessons. One of these is Professor Talamo, an intimate friend of Pope Leo, a professor in two of the Roman Colleges and a member of the Council of the Papal Academy of St. Thomas in Rome. He writes, "Our school, treading in the steps of a universal and constant Christian tradition distinguishes two orders of truth, one rational, the other super-rational, and, without separating or confounding them, tries to unite them. Nevertheless, it does not overlook their difference in value, and while it allows revealed theology to develop chiefly by the light of the outward word of the incarnate *Logos*, and afterwards by that of other, rational criteria, it *strives* to build up philosophy, primarily with the criteria of reason and,

secondarily, with those of common sense, history, *scientific tradition, and where it is necessary and useful, also of divine revelation*" (*Il Rinnovamento del Pensiero Tomistico e la Scienza Moderna*, Siena, 1878). Will F. Parkinson tell me what is meant by 'scientific tradition,' as distinguished, on the one hand, from history, on the other, from divine revelation, if it is not human authority? Again, does not F. Pesch himself tell us that "in all time it has been *fixed* and ratified by the wisest men that those who have excelled in the most copious knowledge of divine and human things, and in the most accurate insight into the beginnings and causes of individual things, ought to be *followed* in the study of truth"? Is not this the clearest assertion of human authority in science?

[ϵ] These phrases are used, no doubt; but so are others, distinctly recognising St. Thomas's authority. For example, on p. 229, we read: "Numquid talis determinationum internarum multitudo forte unitati entis obstat? *Non videtur.* NAM, IPSUM S. THOMAM DICERE audivimus, solum per naturam ipsius 'esse simpliciter' quod in substantia reperiatur, pluralitatem formarum substantialium ejusdem rei impediri." And similar passages might be quoted. Cardinal Zigliara's profession is excellent and, I am sure, sincere; but he fails sadly in it in practice, as the book alluded to, as well as his other works, abundantly show. In the one case where F. Pesch 'deserts' St. Thomas, he does so only to attach himself to other ecclesiastical *authorities* ("*auctores*").

[ζ] This is a very one-sided account. There is surely a difference between a principle stated and a principle used, and I maintain that the principle of the impiety of empiricists is employed in many parts of the book in order to discredit (and F. Pesch rarely does more) their doctrines. On p. 4, an attempt is made to discredit Empiricism by ascribing its origin to corrupt morals, Protestantism and so on. If in any way Empiricism was due to corrupt morals, it was to the corrupt morals of the Catholic Church against which it and Protestantism were a healthy reaction.

[η] I am sincerely sorry to have pained F. Parkinson; but I do not see that a proof (I never meant it as such) is any worse for being taken from a preface, or why a preface, even if it stood before a hundred '*indices*,' should not contain a statement of principles. At any rate, I cannot anywhere else in the book find a statement of principles.

[θ] As this is a mere assertion, I meet it with a direct contradiction.

[ι] I have already answered this sufficiently. The book, I repeat, is an attempt to find a basis for ecclesiastical authority. But I think it is distinctly unfair to say that F. Pesch must, therefore, be of unsound mind. He seems to me to have an unusually strong mind, though it is sadly warped by authority and prejudice.

[κ] For any other reason than because they invalidate F. Parkinson's statement? I can imagine no other. The last *three* theses, and they are the most important in the book and those up to which the whole book leads, assume, what is nowhere proved, the existence of an omnipotent God. These theses are, *(a)* The laws of nature are necessary indeed, but only hypothetically; *(b)* Miracles are possible; *(c)* Miracles may be distinguished from natural events and recognised as of divine origin. These are theses of Natural Philosophy!

[λ] All this, even were it true, is beside the mark. Enough is granted, when it is admitted that there are theses in the book in which the hypothesis in question is a "capital premiss". In a treatise on Natural *Philosophy* it cannot be "rightly supposed to be granted" by any one.

[μ] To this I reply that the Jesuits even now, FF. Liberatore and Cornoldi among them, teach sensism, whatever they or their pupils may say to the contrary. I cannot now enter into the details of this subject; but I assert that the philosophy of the leading Jesuits of this century is sensism and nothing

but sensism. Their "intellect" is no more an intellect in any proper sense than is the reflection of Locke. Any one who will patiently read a recent work *Sulle Dottrine Ideologiche del P. G. Maria Cornoldi*, d.C.d.G. by the Abbé Petri, can readily convince himself of this. Even St. Thomas does not hesitate to say that "Sense is a sort of defective participation in intellect". However, he must not be held responsible for particular statements.

[ν] For a very good reason ; because it can give no such sentence, and I am astonished that F. Parkinson should not know this. I am likewise astonished that he should think "*nihil censurâ dignum*" the equivalent of "free from censure". However, one at least of the consultors of the congregation, F. Trullet, advised that this very sentence should be given.

[ξ] "Dimittantur," however, is the most favourable sentence that the Congregation of the Index can give, as every one acquainted with its constitution well knows.

[o] A judgment of the Congregation of the Index is, I believe, not reversible, when the infallible Pope, acting as chairman of it, as Pius IX. did in the case in question, pronounces it *ex cathedrâ*. Therefore, the present Pope's hands were *and are* tied. That he feels this, is clearly shown by many facts, notably by these, that his intimate friend, Card. Zigliara, wrote a large volume in order to weaken the force of the "dimittantur," and that he himself gave the definition referred to for the same purpose. In spite of all this, the fact remains that the philosophical works of Rosmini received the most favourable verdict which the Congregation of the Index can give.

[π] This speaks badly for the Jesuit tradition, but has nothing to do with the question at issue. The change which took place in the Roman College did not result in the substitution of Dominicans for Jesuits, as professors, but of Jesuits of one shade of opinion for Jesuits of another. There is no such thing as a uniform Jesuit tradition. The Jesuits lost nothing by the change in question.

[ρ] I have never said that Franzelini or any one else was consulted on the subject of the Encyclical ; and that many 'eminent professors' knew nothing of the application, I am prepared to believe. Still this does not in the smallest degree prove that such application was not made.

[σ] Of course ; if he had restored pure Platonism or Epicureanism, they would have done the same thing. But what has this to do with the matter? The first person who in this century advocated a restoration of Thomism was Rosmini.

[τ] Very likely ; but it is true, all the same.

[υ] And I "simply" deny that there is any "clear charge" of duplicity. At the same time, even if I had made a "clear charge" of duplicity, I do not see how F. Parkinson is in a position to deny it.

[ϕ] This is a strange request, since, however many views I might point out as emphasised in opposition to Rosmini's, it would always be possible for F. Pesch or F. Parkinson to say that Rosmini's view was not in the author's mind, especially as Rosmini's name (*and this I distinctly said*) does not occur in the book. What I maintain is that the purpose of the whole movement to which this work belongs is to emphasise, under name of Thomism, views opposed to Rosmini's : and this is true.

[χ] Here I am willing to accept F. Pesch's assurance that he knows other works of Spencer besides those mentioned by him ; but I appeal to any one, whether what is said on p. 7, of his work does not fairly suggest the opposite conclusion. And even he himself claims no more with regard to Lewes, than this : "I know *that he has written*, besides the *History of Philosophy*, other works also," which is surely little enough. But proofs of shallow learning are easy enough to find in the book. It is amusing, for example, to see Whewell classed along with Comte as a "positivist".

THOMAS DAVIDSON.

IX.—MISCELLANEOUS.

Mr. William Cyples, author of *An Inquiry into the Process of Human Experience*, died suddenly, of heart-disease, at Hammersmith on the 24th of August last. He was born, on the 31st of August, 1831, at Longton in the Staffordshire Potteries, the child of parents engaged in the industry of the place, and after educating himself, under the influence of his mother, a woman of unusual strength of mind, he entered upon the life of a journalist. Becoming editor of several provincial papers in succession, and contributing at the same time largely to the best periodical literature, besides publishing two volumes of verse ("Pottery Poems" and "Satan Restored") and (anonymously) several works of fiction, he came finally to London (from Nottingham), in 1877, on the completion of the philosophical book to which he had devoted his chief thought for many years. During the composition of this work, he entered into relations with several of the foremost thinkers of the day and received much encouragement from them. When the book at last appeared in 1880, it did not at the time receive nearly as much recognition as it deserved, though it was reviewed immediately, at length, in Mind XVIII., and afterwards in the *Contemporary Review*. In Mind XIX., the author replied, with great force and spirit, to some criticism that had been made upon his peculiar terminology. Unfortunately, his health began from this time to give way, and the end came upon him before the assurance that his labour had not been in vain. He had steered right into the stream of modern scientific thought in regard to mind, while he had also in him a straining after the ideal not the less marked because of the modest terms in which he spoke of offering 'some hints as to the higher phenomena of consciousness" after "attempting to set forth" the "lower laws" of "the Process of Human Experience". Those who knew him speak of him as a man of great refinement and nobility of character.

Mr. Cecil James Monro died at Hadley, near Barnet, on the 25th of November. Readers of Mind may remember the admirably pointed Note which he wrote in No. IV. on "Locke's alleged Anticipation of Mill's Theory of Syllogism"; also his masterly Critical Notice of Mr. Venn's *Symbolic Logic* in No. XXIV. The pulmonary disease which has carried him off at the age of 49, attacked him first as far back as 1860 and has prevented him from giving adequate public proof of his remarkable powers and attainments. There has been no more ardent worker at the recent developments of logical science, to the study of which he brought the training of an accomplished mathematician. He was also a versatile literary scholar.

The late Alfred Barratt, author of *Physical Ethics* and a prominent contributor to Mind, had been engaged for some years upon a work in General Philosophy when he was suddenly struck down in the spring of 1881, at the age of 36. The MS. was found upon examination to be so far completed in the more important (constructive) part that it is now being seen through the press (by Mr. Carveth Read). It will be published early in the year by Messrs. Williams & Norgate under the title of *Physical Metempiric*. The main text will run to about 250 pp.; while the essays that appeared in Mind will be reprinted in an Appendix. There will be a short introductory memoir by Mrs. Barratt, with contributions from the Master of Balliol, the Warden of All Souls and the Head-Master of Rugby.

A "Society for Psychical Research" has lately been formed "to unite students and inquirers in an organised body, with the view of promoting the investigation of certain obscure phenomena, including those commonly known as Psychical, Mesmeric or Spiritualistic, and of giving publicity to the results of such research". It has resolved itself into six Committees charged respectively with Thought-reading, Mesmerism, Reichenbach's Experiments, Apparitions (Haunted Houses, &c.), Physical Phenomena (commonly called Spiritualistic), and the Literature of the subjects. Part I. of the *Proceedings* of the Society, published in October (Trübner), contains besides an introductory address from the President (Mr. H. Sidgwick) a Report from the Committee on Thought-reading, by Prof. W. F. Barrett and Messrs. E. Gurney and F. W. Myers, with supplementary Reports from Prof. Balfour Stewart and others. The reports turn mainly on the performances of some girls in the family of a Derbyshire clergyman, in the way of guessing some number, word or card without (so far as appears) any of the ordinary means of communication between willer and guesser. The chief reporters have satisfied themselves so completely of the reality and genuineness of the phenomena as already to believe that further advance along the same line of research "will necessitate a modification of the general view of the relation of mind to matter to which modern science has long been gravitating". It is not easy to work against gravitation, and those who contemplate such a necessity have reason to be both active and wary. Having the advantage (over some of the other Committees) of dealing with a class of facts which can be tested with perfect rigour, the 'Thought-reading' Committee should find out what is the exact limit of those maidens' powers. If they can do what is reported, one would expect them to do more. If they can do no more, there must be some good reason for it, which it should be possible to discover. Meanwhile, the hearsay matter drawn into one or other of the Reports might have been left over.

Mr. William Wallace, of Merton College, has been appointed Whyte Professor of Moral Philosophy at Oxford, succeeding the late T. H. Green.

Professor W. Dilthey has been called from Breslau to fill the Chair in the University of Berlin vacated by the death of Lotze.

The Journal of Speculative Philosophy.—Vol. XVI. No. 2. W. T. Harris—Hegel's Four Paradoxes. M. Tuthill—Use, Beauty, Reason. H. K. H. Delff—Dante's Epochs of Culture (trans.). R. A. Holland—Philosophy in relation to Agnosticism and to Religion. Hegel—On the Absolute Religion (trans.). Hegel—Philosophy of the State (trans.). J. Dewey—The Metaphysical Assumption of Materialism. Notes and Discussions. Book Notice (J. H. Stirling, *Text-book to Kant*).

Revue Philosophique.—VIIme Année, No. 10. A. Espinas—Les études sociologiques en France : La science sociale contemporaine (ii.). P. Janet—Un précurseur de Maine de Biran. Th. Ribot—Les affaiblissements de la volonté. Analyses et Comptes-rendus. Notices bibliographiques. Rev. des Period. No. 9. H. Joly—Psychologie des grands hommes (fin). A. Espinas—Les études sociologiques, &c. (fin). Notes et Discussions (Grocler—Les principes de la mécanique de la liberté). Analyses, &c. Notices bibliog. Rev. des Period. No. 12. A. Fouillée—Les nouveaux expedients en faveur du libre arbitre. P. Tannery—Histoire du concept de l'infini au sixième siècle avant J.C. F. Paulhan—Les conditions du bonheur et l'évolution humaine. Analyses, &c. (W. Graham, *The Creed of Science*). Rev. des Period.

La Critique Philosophique.—XIme Année, Nos. 27-42. F. Pillon—Le programme de l'enseignement moral dans l'école primaire (28) ; A propos de la notion de nombre ; l'influence du monisme contemporaire en

psychologie (30); A propos du substantialisme de Mme. Clémence Royer et de M. Roisel (32, 37, 41); A. Costa, *Dieu et l'âme: Essai d'idéalisme expérimental* (42); L. Foucou, *Les préliminaires de la philosophie* (42). C. Renouvier—V. Egger, *La parole intérieure* (29, 32, 33) Positivisme, pessimisme; Vivre—la vie en vaut elle la peine? (31); La logique du système de Schopenhauer (34); La métaphysique de Schopenhauer: Idéalisme, matérialisme, monisme (38, 39); La philosophie de réflexion: analyse des minima de conscience (40, 42, transl. from Mr. Sh. Hodgson). F. Grindelle—J. Sully, *Le pessimisme, histoire et critique.* W. James—Rationalité, activité, et foi (35, 36, 37).

La Filosofia delle Scuole Italiane.—Vol. XXV. Disp. 3. F. Bonatelli—Intorno al valore teoretico dei principii practici. T. Mamiani—Cosmologia e psicologia. T. M.—I sette enigmi del mondo. T. M.—Ancora dei problemi sociali. T. M.—*Della interpretazione panteistica di Platone*, di Alessandro Chiappelli. Bibliografia (T. Davidson, *The Philosophical System of A. Rosmini-Serbati*, &c.), &c.

Rivista di Filosofia Scientifica.—An. I. No. 6. E. Morselli—Carlo Darwin. G. Rosa—La filosofia positiva della storia. G. Boccardo—Gli eretici in economia politica e la loro missione nella sociologia. G. Romiti—L'uniformità nelle leggi dell' evoluzione animale. G. Buccola—La riproduzione delle percezioni di movimento nello spazio tattile, ricerche sperimentali. Rivist. Bib., &c.

Zeitschrift für die Philosophie, &c.—Bd. LXXXI. Heft 2.—J. Kreyenbühl—Die Teleologie als Weltanschauung (iii.). O. Caspari—Herbart's Realismus u. das Problem der Idee als Musterbild mit Rücksicht auf R. Zimmermann's Anthroposophie. B. Münz—Die vorsocratische Ethik. E. Zöller—Die philosophischen Forschungen in Schweden. Recensionen, &c.

Zeitschrift für Völkerpsychologie u. Sprachwissenschaft.—Bd. XIV. Heft 2. A. F. Pott—Zahlen von kosmischer Bedeutung, hauptsächlich bei Indern u. Griechen, u. Wichtigkeit von Genealogien im Mythus (Schluss). F. Philippi—Ist יהוה accadisch-sumerischen Ursprungs? S. Maybaum—Zur Pentateuchkritik. Beurtheilungen.

Philosophische Monatshefte.—Bd. XVIII. Heft 8. E. Wille—Kant's Lehre von der ursprünglich synthetischen Einheit der Apperception. E. v. Hartmann—Die Grundbegriffe in Lasson's Rechtsphilosophie. Recensionen u. Anzeigen (E. Wallace, *Aristotle's Psychology*, &c.). Bibliographie, &c. Heft 9, 10. E. Feuerlein—Die Idee der Verantwortung u. ihre Stelle in Recht, Politik, Ethik. J. M. Vold—Kant's Teleologie. P. Natorp—Analecten zur Geschichte der Philosophie. J. Nathan—Vom Gesetz der vielen Ursachen. Recens. u. Anzeigen. Th. Lipps—Logisches zur Abwehr. Bibliographie, &c.

Vierteljahrsschrift für wissenschaftliche Philosophie.—Bd. VI. Heft 4. A. Wernicke—Den Manen Darwin's. F. Staudinger—Zur Grundlegung des Erfahrungsbegriffs (i.). G. Helm—Der Aether u. die Wirkungen in die Ferne. G. Heymans—Die Methode der Ethik (Schluss). Schmitz-Dumont—Die Kategorien der Begriffe u. das Congruenzaxiom (Schluss). Anzeige (F. Y. Edgeworth, *Mathematical Psychics*), &c.

Other Books, &c., received: C. A. Buchheim, Lessing's *Nathan der Weise*, Oxford (Clar. Press), pp. 302. *Papers read before the Medico-Legal Society of New York*, N.Y. (Vanden Houten), pp. 530. G. Cesca, *Il nuovo Realismo contemporaneo della Teorica della Conoscenza in Germania ed Inghilterra*, Verona, Padoua (Drucker e Tedeschi), pp. 193. N. Grote, *K'Voprossu o Reformje logiki*, Leipzig (Brockhaus), pp. xviii., 349.

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MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

I.—PSYCHOLOGICAL PRINCIPLES.

I. THE STANDPOINT OF PSYCHOLOGY.

It is nowadays generally, though by no means universally, conceded that Psychology is a science and not a branch of philosophy. Nevertheless it must be allowed that the two subjects are closely connected; indeed it is matter of fact, that to philosophy the Science of Mind is indebted for its very existence. For what has been so often remarked of the other sciences holds good also here, *viz.*, that practical needs were the beginning of theoretical inquiries. Only at first sight can it seem strange to associate philosophy with practical wants: a glance at its history will suffice to show that whatever may have been its success or failure, its inciting motive has always been not curiosity, or the mere desire of knowledge, but, as even its name implies, the need of wisdom.[1] In seeking to find their bearings in the world and know what is truth and what is good, men were led to investigate what seemed nearest to them, their own minds; and how largely psychological inquiries have furnished the turning-points of philosophy is evident from such opposed terms as Idealism and Materialism; Sensationalism and

[1] There is perhaps no definition of philosophy which better expresses its practical intent than that which Kant gives as its *Weltbegriff*:—Philosophy is the science which connects all knowledge with the essential aim of human reason *(teleologia rationis humanæ).—K. d. r. V.*, "Methodenlehre," § 3.

Rationalism; Determinism and Libertarianism. Until comparatively lately, the interest in psychical facts rarely extended further than seemed required by such problems as those concerning the nature of things, the criteria of knowledge, and the grounds of moral responsibility. But the world has now come to see that philosophers, as such, make bad psychologists; and also, for the matter of that, mere psychologists bad philosophers: the one lacks the scientific eye for facts generally, the other the speculator's feeling for improving ideas. These considerations of method are, however, in any case, enough to warrant the treatment of psychological questions apart from all side-references to the weightier matters of philosophy. Such a separation has been amply justified by the results as regards the physical sciences; that is to say, these sciences have gained immensely by it; nor can the advance of philosophy be permanently retarded by the extension and systematisation of special departments of empirical knowledge. In fact there is much to be said—though this is not the place to say it—in favour of the opinion that the chief business of philosophy is with the assumptions involved in the methods and data of the several sciences.[1] But if so, though philosophy and science both give and take, yet philosophy must take before she can give. At any rate, save for those who regard philosophy as independent of experience and the human mind as competent to evolve the world *ab initio* by a process of pure thought, it is an obvious advantage to start with knowledge, or what purports to be knowledge, already in some measure formulated and systematised. For this first elaboration of its material, philosophy may be trusted to make a due return: there is no reason to fear that the benefits of division of labour will be less here than elsewhere. In the case of Psychology, then, it is contended, that it is not called upon to ascertain the validity of knowledge or to provide a theory of the external world, or to discuss the existence of a substantial Ego or the nature of the connexion between Matter and Mind: these questions, if they are to be dealt with at all, must be relegated to philosophy. There is a certain department of experience,—as we must be content to call it for the present—the facts of which either coexist together or succeed each other in ways that are known in a more or less disconnected fashion by everybody: to give a clear, distinct, orderly

[1] On this point there is an interesting paper, quite one of the signs of the times, by E. Zeller:—"Ueber die Aufgabe der Philosophie u. ihre Stellung zu den übrigen Wissenschaften," Zeller's *Vorträge*, 2te Sammlung, p. 445.

and complete account of these facts and relations is the problem of Psychology as a science. Any discussion of the bearing of this science upon the leading questions of philosophy will be best deferred till its proper standpoint as a science is determined.

In the several natural sciences the scope and subject-matter of each is so evident that little preliminary discussion on this score is called for. It is easy to distinguish the facts dealt with in a treatise on Light from those that belong to one on Sound; and even when the need arises to compare the results of two such sciences—as in the case, say, of Light and Electricity, there is still no difficulty; apart, of course, from any which the imperfect state of the sciences themselves may occasion. Theoretically, a standpoint is attainable from which this comparison can be made, in so far, say, as the facts of both sciences can be expressed in terms of matter and motion. But with Psychology, however much it is freed from metaphysics, all this is different. It is indeed ordinarily assumed that its subject-matter can be at once defined: "It is what you can perceive by consciousness or reflection or the internal sense," says one, "just as the subject-matter of Optics is what you can perceive by sight." Or, "Psychology is the science of the phenomena of mind," we are told again, "and is thus marked off from the physical sciences which treat only of the phenomena of matter". But whereas nothing is easier than to distinguish between seeing and hearing, between the phenomena of heat and the phenomena of gravitation, a very little reflection may convince us that we cannot in this fashion distinguish internal from external sense, or make clear to ourselves what we mean by phenomena of mind as distinct from phenomena of matter.

Let us begin with the supposed differentia of Internal and External: What are we to understand by an inner sense? The conception of a sense is in strictness rather physiological than psychological; but waiving this for the present, we may say that the psychical states directly consequent on the excitation of a particular sense are independent of feeling and volition, and liable to manifest themselves *ex abrupto* and out of all regard or relation to the existing "contents of consciousness". They are, moreover, in every respect *sui generis* as regards quality; so that no one sense can supply the materials of another, and the possession of five senses furnishes no data as to the character of a possible sixth. Now such a description will apply but very partially to the so-called internal sense. We can imagine consciousness without self-consciousness, still more without introspection, much as we

can imagine sight without taste or smell: we suppose a mouse can feel, but not that it reflects upon that fact. It must indeed be granted that without self-consciousness somewhere there could be no science of any psychical life, whether high or low; just as without hearing there could be no music. But this does not entitle us to speak of self-consciousness as a sense, nor enable us with any exactness to characterise the subject-matter of psychology. For without self-consciousness there would be not only no psychology, but no "ology" of any sort, inasmuch as self-consciousness is the first outcome of that stage of mental and social development on which the power to form and compare general conceptions depends, and is itself more or less involved in any exercise of that power. Thus we do not by means of it passively receive impressions differing from all previous presentations, as the sensations of colour for one couched differ from all he has experienced before: the new facts consist rather in the recognition of certain relations among pre-existing sensations, *i.e.*, are due to our mental activity and not to a special mode of what Kant called our sensibility. For when I taste I cannot hear that I taste, when I see I cannot smell that I see; but when I taste I may *be conscious that I* taste, when I hear I may *be conscious that I* hear: in this way all the objects of the external senses are recognised as having new relations by the mis-called "internal sense". Moreover the facts so ascertained are never independent of feeling and volition and of the contents of consciousness at the time as true sensations are. But perhaps the most summary way of disposing of the conception of an internal sense is to cite the evidence of the mental pathologist: there is no more analogy between self-consciousness and a sense than there is between blindness or deafness and delirium, or what in popular language is called "being beside yourself". Or if we consult the physiologist we find there is no organ or "centre," and no evidence of any such, that could be regarded as the "physical basis" of this inner sense.

To the conception of an internal perception or observation the preceding objections do not necessarily apply, that is to say, this conception may be so defined that they need not. But then in proportion as we escape the charge of assuming a special sense which furnishes the material for such perception or observation, in that same proportion are we compelled to seek for some other mode of distinguishing its subject-matter. For, so far as the mere mental activity of perceiving or observing is concerned, it is not easy to see any essential difference between this process whether the observations are

psychological or physical. It is quite true that the so-called psychological observation is more difficult, because the facts observed are often less definite and less persistent, and admit less of actual isolation than physical facts do; but the process of recognising similarities or differences, the dangers of mal-observation or non-observation are not materially altered on that account. It may be further allowed that there is one difficulty peculiarly felt in psychological observation, the one most inaccurately expressed by saying that here the observer and the observed are one. But this difficulty is surely in the first instance due to the very obvious fact that our powers of attention are limited; so that we cannot alter the distribution of attention at any moment without altering the contents of consciousness at that moment. Accordingly, where there are no other ways of surmounting this difficulty, the psychological observer must either trust to representations at a later time; or he must acquire the power of taking momentary glances at the psychological aspects of the phase of consciousness in question. And this one with any aptitude for such studies can do with so slight a diversion of attention as not to disturb very seriously either the given state or that which immediately succeeds it. But very similar difficulties have to be similarly met by physical observers in certain special cases, as, *e.g.*, in observing and registering the phenomena of solar eclipse; and similar aptitudes in the distribution of attention have to be acquired, say, by extempore orators or skilful surgeons. Just so little, then, as there is anything which we can with propriety call an inner sense, just as little can we find in the process of inner perception any satisfactory characteristic of the subject-matter of psychology. The question still is, What is it that is perceived or observed? and the readiest answer of course is: Internal experience as distinguished from external, what takes place in the mind as distinct from what takes place without.

This answer, it must be at once allowed, is adequate for most purposes, and a great deal of excellent psychological work has been done without ever calling it in question; yet the history of philosophy seems to show that much of the confusion in modern theories of knowledge is due to this unquestioning acceptance of the distinction of internal and external experience by psychologists. It is then here contended that—however valid from certain points of view, and when duly explained—this distinction still is not one that can be drawn from the standpoint of psychology, at least not at the outset. From this standpoint it appears to be either (1) inaccurate or (2) not extra-psychological. As to (1)—the

boundary between the internal and the external was, no doubt, originally the surface of the body, with which the subject or self was identified: and in this sense the terms are of course correctly used. For a thing may, in the same sense of the word, be "in" one space and therefore not in, *i.e.*, out of, another; but we express no intelligible relation if we speak of two things as being one in a given room and the other in last week. Anyone is at liberty to say if he choose that a certain thing is "in his mind"; but if in this way he distinguishes it from something else not in his mind, then to be intelligible this must imply one of two statements, *viz.*, that the something is actually or possibly in some other mind, or, his own mind being alone considered, that at the time the something else does not exist at all. Yet, evident as it seems that the correlatives in and not-in must both apply to the same category, whether space, or time, or presentation (or non-presentation) to a given subject, and so forth; we still find psychologists more or less consciously confused between "internal," meaning "presented" in the psychological sense, and "external," meaning not "not-presented" but corporeal or oftener extra-corporeal. But (2), when used to distinguish between presentations, (some of which, or some relations of which with respect to others, are called "internal," and others or other relations, "external") these terms are at all events accurate: only then they cease to mark off the psychological from the extra-psychological, inasmuch as psychology has to analyse this distinction and to exhibit the steps by which it has come about. On this ground objection may be taken also to the negative differentia of inextension proposed by Dr. Bain, as well as to Kant's doctrine that a special kind of inextension, *viz.*, time, is the form in which psychical facts appear. As to Dr. Bain, he on second thoughts rightly disposes of his own distinction. After stating that "the department of the Object, or Object-World, is exactly circumscribed by one property, Extension," and that "the world of Subject-experience is devoid of this property," so that "all that comes within the sphere of the subject is spoken of as the Unextended;" he proceeds to say: "But, *as Object-experience is also in a sense mental*, the only account of Mind strictly admissible in scientific Psychology consists in specifying three properties or functions . . . through which all our experience, as well Objective as Subjective, is built up".[1] The fact is, then, that this distinction too is made from another than the psychological standpoint; from that,

[1] *Mental Science*, pp. 1 and 2.

viz., of a theory of Knowledge, as when Dr. Bain in opening his work says: "Human Knowledge, Experience or Consciousness falls under two great departments," &c.—a statement, by the way, which would surely have been clearer both in itself and in relation to its context had the word Consciousness been omitted. Similar remarks apply also to Kant quite apart from any discussion of his theory of an internal sense. It may be true that from the point of view of a theory of Knowledge psychical facts *as known* are but a flux of presentations, whereas physical facts *as known* are the positions and motions of bodies attracting and repelling each other according to mathematical laws; but this does not really help us to define psychology. For the facts of psychology and the facts of physics are, as known *to somebody*, both alike facts of psychology, whatever else they may be. It is not, however, worth while to discuss this point further at this stage; but we have still to examine whether the distinction of phenomena of Matter and phenomena of Mind furnishes a better dividing line than the distinction of internal and external.

The term Phenomenon has several meanings, or rather several implications, of which now one, now another, is emphasised. Thus we have—(1) what is manifest, patent, evident: here the implications are that there are eyes to see, ears to hear, &c., and still more, that all such can see, hear, &c.; those that do not are not normal: this the lexicons call the objective meaning. Then we have what *appears*, as distinct from what *is* (*φαινόμενον* as opposed to *ὄν*); and here there are two implications, on either or both of which stress may be laid: (2) on the subject side there may be error, *Schein*, as the Germans say, in place of *Erscheinung;* or (3), on the object side, what is to be seen or understood may be related in some unknown way to an unrevealed and incomprehensible *ens per se*. We may call (1) the popular meaning, (2) the sceptical, and (3) the philosophical. As popularly used, then, Phenomenon is equivalent to "fact," "event," &c., but generally with the understanding that the fact or event is of scientific interest. But, because of the flavour of (2), and the more decided flavour of (3), that are apt to hang about the term; it is surely better for purely scientific writers to make but sparing use of it, as indeed the more careful of them do. Especially is this desirable in the case of psychology, now that the Kantian use of "phenomenon" implies a view of psychical facts which some may not be prepared at the outset to accept, and which there is no need to anticipate.[1]

[1] Referring of course to the *rôle* of the Thing *per se* in the "Æsthetik," and especially to the theory of an inner sense.

Let us, however, retain for a moment the popular use of the word, because its implications may serve to make clearer the difficulty of distinguishing between the facts of psychology and the facts of the so-called Object-sciences. The word Phenomenon, as we have seen, implies presentation to a subject, and wherever there is presentation to a subject it will be allowed that we are in the domain of psychology. But in talking of physical phenomena we, in a way, abstract from this fact of presentation. Though consciousness should cease, the physicist would consider the sum total of objects to remain the same: the orange would still be round, yellow and fragrant as before. For, the physicist—whether aware of it or not—has taken up a position which for the present may be described by saying that phenomenon with him means appearance or manifestation, or—as we had better say—object, not for a concrete individual but rather for what Kant called *Bewusstsein überhaupt;* or as some render it, the objective consciousness; *i.e.*, for an imaginary subject freed from all the limitations of actual subjects save that of depending on "sensibility" for the material of experience. However, this is not all, for as we shall see presently, the psychologist also occupies this position; at least if he does not, his is not a true science. But further, the physicist leaves out of sight *altogether* the facts of attention, feeling and so forth, all which actual presentation entails. From the psychological point of view, on the other hand, the removal of the subject removes not only all such facts as attention and feeling, but all presentation or possibility of presentation whatever. Surely, then, to call a certain object, when we abstract from its presentation, a material phenomenon; and to call the actual presentation of this object a mental phenomenon, is a clumsy and confusing way of representing the difference between the two points of view. For the terms "material" and "mental" seem to imply that the two so-called phenomena have nothing in common, whereas the same object is involved in both; while the term "phenomenon" implies that the point of view is in each case the same, when in truth what is emphasised by the one the other ignores. It appears, then, that we are once more bound to conclude that Psychology cannot be marked off from the other sciences by any method which suffices to mark these off from each other. We shall see this still more clearly, perhaps, if we reflect for a moment on the current dualism of Mind and Matter, and we can do this without any serious trespass on the metaphysical domain.

But probably it will be at once urged, Why meddle with metaphysics at all, if psychology is really an empirical

science? For nobody takes up psychology in these days without religiously disavowing all metaphysical assumptions; but then, it is to be feared these good people forget how many such assumptions they are liable to be committed to by common language. Hearing so often that philosophy is the vocation of a select few, we little dream that our great-grandmothers' philosophy is embodied in our mother-tongue. No doubt it would be pedantic to quarrel with the ordinary use of the terms Matter and Mind; and there is no need to maintain that ontology in any form is chimerical. But it is surely within our province to inquire whether the conception of Matter and Mind as two substances is not scientifically obscure and one to be avoided. For the term substance is not straightway applicable in the same sense both to material and mental facts. When we speak of matter as a substance, the conception we form is due to certain relations among presentations as given to us; but when we speak of psychical substance we mean the subject to whom these presentations are given. And if we proceed to call our presentations modes or states of such a substance, we are subsuming a more general relation under one more special. The presentation of an object to a subject is, it is maintained, a fact co-extensive with our experience: whereas that relation among presentations which has led us to the conception of substance is but one among others. We cannot, then, include the relation of subject and object in presentation under the category of substance and mode without making the induction that a conception which is appropriate to a part of our experience is so to all. Such induction may turn out true, but it is at least premature. The subject might be rightly ranged under the category of Substance, even though its objects are not its modifications; but the point here urged is that Mind as a name for Subject + Presentations ought not at the outset to be brought under this category.

Paradoxical as it may appear, we must then conclude that Psychology cannot be defined by reference to a special subject-matter as such concrete sciences, for example, as mineralogy and botany are; and, since it deals in some sort with the whole of experience, it is obviously not an abstract science, in any ordinary sense of that term. To be characterised at all, therefore, apart from metaphysical assumptions, it must be characterised by the standpoint from which this experience is viewed. It is by way of expressing this that widely different schools of psychology define it as subjective, all other positive sciences being distinguished as objective. But this seems scarcely more than a first approximation to

the truth; and, as we have seen incidentally, is apt to be misleading. The distinction rather is that the standpoint of psychology is what is sometimes termed "individualistic," that of the so-called object-sciences being "universalistic": both alike being objective in the sense of being true for all, consisting of what Kant would call judgments of experience. For psychology is not a biography in any sense: still less a biography dealing with idiosyncrasies, and in an idiom having an interest and a meaning for one subject only, and incommunicable to any other. Yet, notwithstanding this avowal, it would doubtless be thought by many a rash thing in these days to maintain that the standpoint of psychology is individualistic. Locke, Berkeley, and Hume, on the one hand, Leibniz and the Wolfians on the other, have, we are taught, combined to bring individualism into discredit, and its day is over. It is true that some of the best philosophical writing we have had in England of late has been directed to showing the shortcomings of these two lines of thought. But perhaps the remark may be ventured that our English neo-Kantians, as they are sometimes styled, scarcely take all the pains they might to distinguish between psychology and epistemology. The fault of Locke and Berkeley was that they regarded the theory of knowledge as a psychological problem, and set to work accordingly to study mind simply for the sake of this problem, but none the less their standpoint was the proper one for the science of psychology; and however surely their philosophy was foredoomed to a collapse, there is no denying a steady psychological advance as we pass from Locke to Hume and his modern representatives. By "idea" Locke tells us he means "whatsoever is the object of the understanding when a man thinks" *(i.e.,* is conscious), and having as it were shut himself within such a circle of ideas he finds himself powerless to explain his knowledge of a world that is independent of it, but he is able to give a very good account of some of these ideas themselves. He cannot justify his belief in the world of things whence certain of his simple ideas "were conveyed" any more than Robinson Crusoe could have explored the continents whose products were drifted to his desert island, though he might perhaps survey the island itself well enough. Berkeley accordingly, as Prof. Fraser happily puts it, abolished Locke's hypothetical outer circle. Thereby he made the psychological standpoint clearer than ever—hence the truth of Hume's remark, that Berkeley's arguments "admit of no answer"; at the same time the epistemological problem was as hopeless as before—hence again the truth of Hume's

remark that those arguments "produced no conviction". Of all the facts with which he deals, the psychologist may truly say that their *esse* is *percipi;* inasmuch as all his facts are facts of presentation, are ideas in Locke's sense, or objects which imply a subject. Before I became conscious there was no world for me; should my consciousness cease, the world for me ceases too: had I been born blind, the world would for me have had no colour; if deaf, it would have had no sounds; if idiotic, it would have had no meaning. Psychology, then, never transcends the limits of the individual: even the knowledge that there is a real world, as common-sense assumes, is, when psychologically regarded, an individual's knowledge, which had a beginning and a growth, and can have an end. In fact, for the psychologist it is not essentially knowledge, but partly possible, partly actual, presentations in the mind of A, B, or C: just as this page is for the printer essentially "copy," and only for the reader essentially "discourse".[1] But what the psychologist has to say about knowledge is, of course, itself knowledge, *i.e.*, assuming it to be correct; the knowledge about which he knows is however for him not primarily knowledge, but "states of consciousness". But now though this Berkeleyan standpoint is the standpoint of psychology—as we find it occupied, say, by J. S. Mill and Dr. Bain—psychology is not pledged to the method employed by Berkeley and by Locke. Psychology may be individualistic without being confined exclusively to the introspective method. There is nothing to hinder the psychologist from employing materials furnished by his observations of other men, of infants, of the lower animals, or of the insane; nothing to hinder him taking counsel with the philologist or even the physiologist, provided always he can show the psychological bearings of these facts which are not directly psychological. In some cases this is easy and certain, nay, almost instinctive; in others it is difficult and problematic at the best. Nor again are we bound, because we take the individualistic standpoint as psychologists, to accept the philosophical conclusions that have been reached from it; unless, indeed, we hold that it is the right point of view for philosophical speculation: a psychologist *may* be an idealist in Berkeley's sense or in

[1] *Cf.* Art. "Philosophy and Psychology," by the Editor, MIND XXIX., pp. 15, 16. This seems the most fitting place for the writer to state that this paper was planned and in good part written before the appearance of the Editor's article in the last number rendered much of it superfluous. The Editor, however, wishes it to appear for the sake of other papers that are to follow.

Fichte's, but he need not. He is just as free, if he see reason, to call himself after Hamilton, a natural realist; only psychology will afford him no safe warrant for the realism part of it. Once again the psychological standpoint shuts out dualism, and indeed any form of ontology, and along with them the representative theory of perception: these too may be true, but from this point of view there is no contrast or parallax possible which can give them a psychological basis.

It may perhaps serve to set this view of psychology in a clearer light if the reader will allow a brief digression, in which the attempt will be made to exhibit more explicitly the epistemological standpoint as it is here conceived. In the course of the development of that theoretical Individual whom psychologists sometimes unconsciously assume in order to avoid the difficulties besetting questions of heredity—the Individual, that is, who is taken to have existed continuously from the dawn of psychical life—there was a stage, not long posterior to the acquisition of language, at which the experience of one individual, so far as this could take the form of conceptions and find expression in words, became common property. At this point a new conception became possible, which we may call for the present, that of Mind in general, or Mind with a capital M. The term is not a happy one, neither is it accurate, but it is current, and some of the confusion between psychology and philosophy is due to its general use. This interchange of experience by means of speech not only sharpens, as iron sharpeneth iron, but brings into existence a higher kind of Experience, in which the individual transcends the limitations of his own direct perceptions. This "intersubjective intercourse"[1] reveals the fact that certain uniformities of coexistence and sequence among perceptions are generally or universally experienced. There is no need to say: When A sees x he next hears y; for the like holds of B, C, D, . . .; it is possible to say at once: The lightning flash is followed by thunder. Once started upon this track progress may be indefinite: ever new investigators, ignoring the subjective interests of what they perceive, add to the stock of common Experience. This higher Experience, it need hardly be said, consists of conceptions, not of perceptions, which *quâ* perceptions can only be subjective and individual. It is so far independent of place, time and person that it can be embodied in symbols and applied in the comprehension of perceptions by any mind indifferently for

[1] I am indebted for this term to Dr. Dühring's *Natürliche Dialektik*, s. 2.

whom the constituent symbols have a meaning. It is thus at once Thought and Knowledge—the product of combined human activity and a clue or scheme, more or less accurate and complete, of what was, is, or will be perceivable. When so regarded the organisation of this joint product becomes itself the object of investigation, and a new set of conceptions emerges. It is found to have a certain general structure, which we term logical: that is, it can be represented as compounded of hierarchies of conceptions having "the matchless beauty of the Ramean tree," and of judgments expressing certain relations among these, and depending on other judgments as their logical conditions. Such an analysis leads to the detection of sundry conceptions as yet inchoate or ill-assimilated, and sundry contingent judgments having no logical warrant. It thus suggests an ideal of what a system of knowledge might be, and it becomes possible to give a formal outline of this ideal. But what of those outstanding knowledges that have not yet been caught up into the ideal? For some a place in the general system is only a question of their own more perfect elaboration; but with others there is a more serious difficulty. A place for them can only be found at the expense of knowledges already recognised as logical members of the ideal in course of consummation. Here is a new and hard problem: how are we to decide between knowledge and knowledge? But again, even in the orthodox ideal, as at present realised—whichever it is—there are certain highest conceptions; how are these conceived? and certain so-called principles, assumed but not subsumed; what warrant have they? It is to meet questions like these that there has arisen a theory of Knowledge.[1]

This meagre outline may suffice to exhibit generally the character of the subject-matter and methods of a scientific epistemology. The subject-matter is this body of knowledges, and from a comparison of these the ideal of knowledge is derived: the part played by mathematics in this respect from Descartes onwards to Kant of course needs no mention. The logically more coherent mass effects the disintegration of the less coherent, and not contrariwise: *Magna est veritas et prævalet.* And the critical study of this epistemological structure itself perhaps refutes, as it proceeds, some of the

[1] There is indeed a very different question often associated with the term, *viz.*, Are things known as they are in themselves? To the question as so stated no answer has been, or indeed ever will be given, for it is nonsensical. Resolved into the rational form: Are things truly or really known? it is but another aspect of the problems mentioned above.

hypotheses with which it began. Like Locke's "poor Indian philosopher," for example, "who imagined that the earth always wanted something to bear it up," the student of this higher logic might set out with the notion that as *axiomata media* were logically dependent, so Principles must either be deduced or else have only a subjective guarantee. But he may find there is a sort of gravitation in knowledge too, that what seemed true of the parts is not true of the whole, that so far as first principles are reached, the system is logically rounded off by the *ἀπαγωγὴ εἰς ἀδύνατον*.[1] We sometimes hear talk of the criteria of certainty, and certainty it must be admitted is a purely psychological fact. But strictly speaking there is no such thing as a *criterion* of certainty as distinct from a criterion of truth or knowledge. The certainty with which one man, or even all men, may assent to a proposition will not justify the critical philosopher in accepting it as true; but, contrariwise, its truth will justify their certainty. Though we have every reason to regard certainty as a valuable preliminary guide to truth, it is not the ultimate criterion. But it may be said:—"There is at all events one case in which certainty and truth are one and inseparable, *viz.*, when I turn my attention to what is passing in my own consciousness and say, for example, I am now feeling cold, or perceive that the fire is out. Of this testimony of consciousness I am absolutely certain, and there can be no knowledge if this is not true, and yet there is no evidence of this truth but my certainty." Good, but so much of this as is "absolutely certain" is not knowledge, but material for knowledge: so much of it as can claim to be knowledge is not absolutely certain. What is beyond doubt is the existence of your presentation; what is not, is your description, analysis or classification of it. It is with such intellectual assimilation that knowledge about this state of consciousness begins, and at once a distinction is possible between the process psychologically considered and logical methods for securing a correct result—between subjective perception and scientific observation.

Comparing Psychology and Epistemology, then, we may say that the former is essentially genetic in its method, and might, if we had the power to revise our existing termino-

[1] "Principien können als solche nicht genetisch entwickelt werden; denn sonst wären sie keine Principien und hätten vielmehr einen fremden Anfang. Sie sind daher nur durch einen Erkenntnissgrund—im Gegensatze des Sachgrundes—darzuthun. Alle blosse Erkenntnissgründe laufen auf einen indirekten Beweis hinaus." Trendelenburg, *Logische Untersuchungen*, 1862, ii., 406.

logy, be called Biology; the latter, on the other hand, is essentially devoid of everything historical, and treats, *sub specie æternitatis*, as Spinoza might have said, of Human Knowledge, conceived as the possession of Mind in general. The principles of psychology are part of the material, the logical worth and position of which a theory of knowledge has to assign; but they are not, neither do they furnish, the critical canons by which knowledge is to be tested. Yet in three several ways epistemology has been supposed to depend upon psychology, in so far, *viz.*, as psychology might explain the origin of knowledge, the process of knowing, or the limits of the knowable. But it can answer none of these questions in the way required. To ask them at all betrays serious misconception as to the nature of psychology. (1) Even assuming that certain forms or facts of knowledge are what they are, not because our experience has been what it has; but because before all experience our nature was so preformed; still, for aught we could see to the contrary, these innate elements might like some bias in the blood—to which indeed Descartes compared them—have required the corrective medicine of experience. Nay, it is hardly too much to say that at any given stage of development this is what happens: *experientia docet*. Psychological innateness has then no necessary connexion with logical priority except for a philosophy that confounds knowing and thinking. (2) Again, the *process* of knowing throws no light on the "reality" of knowledge. There have been those who regarded psychology as a species of mental chemistry; but if it is, it can never resolve a perception into a ternary compound of elements contributed partly by the external reality, partly by a sensory medium, partly by the mind. It can show under what circumstances a given individual will come to regard this or that as conceivable or inconceivable, and be subjectively certain that his conceptions tally with things: how it was, for example, that the old Chaldæan was just as sure of his astrology as some modern Laplace of his astronomy; but it can contribute nothing towards the decision in an imaginary dispute between them. All that psychology can tell us only concerns the relation of a given concept *a* or *b* to other concepts in the mind of M or N, and the intellectual feelings that accompany any judgments they make concerning these concepts; but the question in epistemology is not what *will* M or N predicate of *x* or *y*, but what *ought* he to predicate, or rather what ought to be predicated. (3) Finally—it is, no doubt, as Locke says, "useful to know the extent of our comprehension"; but can we by "an inquiry into the nature of the understanding,"

which is to reveal "the utmost extent of its tether," ascertain the limits of human knowledge? May we not say of such an attempt what Locke himself said of the attempt to imagine infinity: it is like trying "to adjust a standing measure to a growing bulk"? Psychology can tell us what senses we have and what is the sensibility of each, but it cannot even then say how far their deficiencies may be met by other means: had Locke lived to-day he would hardly, for example, have maintained as sweepingly as he did, that all connexion between secondary and primary qualities is undiscoverable. Psychology may tell us perhaps what are the limitations of consciousness from moment to moment ("die Enge des Bewusstseins," as the Herbartians say); it may even ascertain statistically the stock of ideas an average mind will hold, but it can fix no limit to the logical extension or intension of such ideas, to the facilities afforded by symbols for their readier command, or to the amount of simplification or explanation of which they admit. One factor among many upon which depends the *rate* of growth of knowledge is this "extent of our comprehension"; just as the rate at which we should bale out the Atlantic would depend in part on the size of our buckets. But what actually limits knowledge at any one time is definite ignorance, and whenever such ignorance has been removed it has been not by any extension of the psychological tether, but by the methodical application of existing knowledge by means of experiment, criticism, hypothesis and verification, to the obstructing *ignotum*. So far knowledge has contained the means of its own advance, and mere psychology cannot tell us whether this is to hold always or must cease at some point, while there remain possibilities of knowledge still beyond.

Psychology seems in fact far more intimately related to Metaphysics, that is to say to theories about Being and Becoming, than to theories of Knowledge. Its connexion with the latter, as terms like Sensationalism and Rationalism show, has been due to confusions such as we have been just discussing. But between monistic or monadistic theories of the Universe, whether idealistic or realistic, and the dualism of ordinary common-sense, if a decision is possible at all—it is, at all events, not possible without taking account of psychology. The natural outcome of speculation from the psychological standpoint is idealism, while from the standpoint of the physical sciences materialistic speculations are an equally natural result. In everyday life our practical interests lead us to occupy now the one point of view and

now the other with no concern about their general relations. In some cases facts of mind appear to have no correlatives or equivalents in facts of body and *vice versâ*; in others the relation is so intimate and familiar that we talk indifferently of mind and head, heart and feelings, keen sight and keen eyes, skill and cunning, or dexterity and handiness. Hence the dualism of Mind and Matter and the conception of man as a *mélange* of both with which modern speculation begins. Since the time of Descartes our knowledge of particular facts connecting these two "aspects," as it is now the fashion to call them, has enormously increased. Evidence is advanced for an automatism more thoroughgoing than any of which Descartes dreamed. Man, the paragon of animals, is held to have been evolved from some structureless protozoon, mind and organism advancing step by step together. The manifold forms of reflex action, and the ingenious adaptations of structure found not only in animals but even in plants, seem to imply something psychical where there is else no evidence of it. Small wonder, then, that we hear of physiologists and psychologists who say:—We have found our several phenomena exactly related yet differing indeed, but differing only as the concave differs from the convex.[1] The wonder is the less when we are told that modern physics has made for ever clear the impossibility of an interaction between mind and matter. Even Descartes and Locke sometimes allowed themselves to talk of an *influxus physicus*. But now it is said, we are shut up to some form of occasionalism unless we resolve this "mystery of mysteries," as Hamilton termed it, by the assumption of a psycho-physical monism. Whatever be the philosophical value of such a doctrine, it is manifestly desirable, at a time when other sciences are perplexed between the teleological and the mechanical, for psychology to be, so to say, as psychological as it can. When the relations of two sciences are in question, it is indispensable that the position and conceptions of each should be clear of all confusion. And whatever be the final outcome, it is contended that the treatment of Psychology which is known as that of subjective idealism is most likely to prove logically coherent, and is that which will best subserve the co-ordination of psychical facts with physical, when the time comes to attempt this in a scientific way.

JAMES WARD.

[1] This favourite simile of Fechner and Lewes is, as was pointed out to me by Professor Geddes, really due to Aristotle (*Eth. Nic.* I., xiii., 10).

II.—REACTION-TIME AND ATTENTION IN THE HYPNOTIC STATE.

In the autumn of 1881, a series of public exhibitions was given in Boston by an itinerant "mesmeriser" who was attended from city to city by a remarkable hypnotic subject whom we will designate as A. B. He was about 30 years of age, an extreme blonde, with narrow and retreating chin and protuberant brows, a cabinetmaker by trade, of fair intelligence and physical development, the head of a small family, and, he said, prone to sleep-walking from boyhood. Physicians and others elsewhere by whom he had been manipulated, had directed their attention almost solely to the determination or demonstration of the reality of his abnormal state, and had repeatedly used to this end such drastic tests as in the normal state cause considerable pain. Pistols had been discharged near his ear, sharp instruments thrust into his body, caustic substances applied to the sensitive parts of the mouth and nostrils, and strong electric shocks given through various parts of his body, so that it was with difficulty and only by promising to abstain from everything painful and unpleasant, by allowing him to bring a friend to watch me, and by a small pecuniary compensation, that he was induced to visit the laboratory at appointed intervals.

Dr. James Braid, as is well known, explained most of the phenomena to which he gave the name of hypnotism as due, not to odic or mesmeric or vital force or to any influence which came from without or passed beyond the limits of the human body, but only to an unusual degree of "concentration of Attention" variously directed by suggestions of many kinds. Although confessedly not a psychologist, he believed he had succeeded in showing that nothing transcendent but only subjective phenomena were involved, and quotes approvingly a statement describing his work in this field as a study of the "pathology of attention". The important researches of Heidenhain in Germany, though perhaps fortunately conducted without full understanding of Braid's results, and though fruitful and suggestive in the highest degree, were not long continued after Bürger demonstrated that all his effects upon hypnotic subjects might be produced by suggestion without any

material stimuli[1] or physical contact. Although G. Schneider has distinctly asserted that the psychological cause of hypnotism must be found in attention, Dr. G. M. Beard of New York has urged this theory more radically and consistently than any one since Braid, in 1877 and in a number of publications since. On the other hand, the opinion has been expressed in nearly all of the many recent studies of Reaction-time or the Personal Equation, that the most effective way of reducing this was by a strong concentration of attention upon the expected stimulus and the intended reaction. Although fatigue, practice, and strength of the stimulus are co-factors in determining reaction-time, it is thought that by opening certain nerve-tracts or by preparatory innervation of the reacting muscles, the attention acts as a special agent in this acceleration.[2] Thus it had long seemed desirable to submit the hypnotic to the test of the physiological theory of attention. To this end the first object with A. B. was to determine the simple reaction-times in the normal and in the abnormal state respectively.

For this purpose the following arrangement of apparatus was found serviceable. The primary electric current was made to pass through a Halske hammer in such a way as to be interrupted whenever the finger of the operator broke the contact with the platinum-point of the screw, by pressing down the spring which held the lever against it. The breaking of this primary circuit released a steel rod vibrating 107 times per second, which had been drawn and held in a slightly bent position by a magnet in the same circuit, and at the same instant gave a distinct shock to the left forefinger of the hypnotic subject through a secondary or alternative circuit *(Nebenschliessung)*. He was directed to press the lever of a relay key with his right forefinger (which closed the primary current and arrested the vibration of the rod by drawing it firmly to the magnet again), as soon as possible after feeling the shock in the left forefinger, having been placed in another room that he might not hear the click of the operator's key and react from a quicker perceived auditory impression. Thus the time during which the rod was vibrating would represent the reaction-time desired. To record these vibrations a tinsel pen was fastened to the end of the rod and allowed to play upon the surface of a hori-

[1] See Note entitled "Recent German Researches on Hypnotism," by the writer (MIND XXI. 98), for digest and literature of these researches up to the date of writing.

[2] *Cf. inter alia*, Wundt, *Grundz. der Physiol. Psychologie*, 2te Aufl. ii. 226, and Hermann, *Handb. der Physiologie*, ii. 286, &c.

zontal Marey drum covered with smoked glazed paper, the magnet and vibrating rod being supported on a Marey screw sledge apparatus, and this moved slowly from one end of the drum to the other by a band connecting wheels on the axes of the drum and the screw of the sledge respectively. Thus it was possible to record 40 or 50 reactions without stopping the apparatus.

After the first series of reactions in the normal state had been taken, and a few minutes allowed for rest, it was with some anxiety that I saw the attendant make the necessary "passes" and seat A. B. again before the apparatus. Previous subjects had not been able to hold their attention to the work of making the reactions, or failed to comprehend what was wanted, or passed from the abnormal state into a state closely resembling sleep, and soon ceased to react at all. A. B., however, after a time, not only reacted to every stimulus in a series of from 40 to 50, but pressed down the key with the right forefinger with increasing energy till towards the end of the series this movement became prolonged, violent and almost crampy, the reaction-time, however, not differing essentially from the first to the last part of the series. After he was roused, 15 minutes were allowed for rest before a final series of reactions in the normal state was made. The following table presents the average reaction-time for three observations made on successive weeks and recorded in vibrations of a rod swinging, as was above stated, 107 times per second :—

TABLE I.

NORMAL REACTION-TIME.		ABNORMAL REACTION-TIME.		NORMAL REACTION-TIME.			
Number of reactions.	Average reaction-time in vibrations.	Number of reactions.	Average reaction-time in vibrations.	Number of reactions.	Average reaction-time in vibrations.	Average time of the two normal series.	Number of the series of observations.
31·0	32·3	50·0	20·7	39·0	42·0	37·1	I.
22·0	44·2	49·0	18·3	35·0	39·1	41·6	II.
36·0	29·0	49·0	23·1	28·0	31·0	30·0	III.
	35·1		20·7		37·3		
	0·328		0·193		0·348	Average time in the three series in seconds.	

From this table it appears that the reaction-time, though reduced in the abnormal state from 33 to 19 hundredths of

a second, is by no means extremely small. With scientific men who have measured their reaction-time from hand to hand in a similar way, the results vary from 108 to 191 thousandths of a second.[1] But for one presumably not practised either in such reactions or in fixing the attention very long or sharply the result is noteworthy.

Scarcely less so is the following table of average errors, in which all those reaction-times in excess of the average reaction-time are themselves averaged in the plus column, and those less than the average reaction-time are averaged in the minus column, no account being taken of those few cases in which the time of a single reaction chanced to coincide with the average time of the entire series :—

TABLE II.

NORMAL.		ABNORMAL.		NORMAL.		No. of the series of observations. *Cf.* Table I.
+	−	+	−	+	−	
8·7	8·5	9·8	3·2	15·5	7·6	I.
18·5	14·8	3·5	3·4	9·6	11·7	II.
7·1	7·6	12·0	3·8	5·5	5·2	III.

The most obvious result from this table is the very slight variation of the minus average error, amounting to but ·032 of a second, and indicating an approximation to a limit or minimal value not apparent in the reaction of the normal state. In the abnormal state the reaction-times are much more uniform than in the normal state, and the reactions in excess of the average time are few, and their excess correspondingly great, while in three or four individual reactions the time is reduced almost to one tenth of a second. In the second observation, when the sleep seemed soundest and the reaction-time was least, the average error in excess was also very small, suggesting the possibility that the few slow reactions which so increased the average reaction-time in the first and especially the third observation were due to ineffective tendencies to awake. 329 reactions, however, are too few to base any conclusive inferences upon, and at this point our subject and his "mesmeriser" whom he attended went to a distant city, and no suitable subject has yet been found on which to continue our observations.

[1] See Hermann's *Handbuch der Physiologie*, ii. 263.

Along with these observations another series of studies of simple Association-time, suggested by the methods of Galton[1] and Wundt,[2] was begun upon A. B. and another hypnotic subject. Lists of familiar monosyllabic words were carefully prepared beforehand in perpendicular columns on long strips of paper. When the hypnotiser pronounced a word in this list, the hypnotised subject was directed to think *as quickly as possible* of any other word suggested by it, and pronounce it while an observer recorded as nearly as possible upon the revolving drum the instant when the hypnotiser's word and the subject's response respectively were heard, that the "association-time" might afterwards be measured by subtracting from the total interval the time occupied in reacting upon the simple apprehension of the hypnotiser's word. In these experiments it has been assumed that the first word suggested to the subject's mind by the word thus sprung in upon his consciousness will lie along the track of easiest, quickest, or most automatic association, which track would be left for less frequented lines, somewhat in proportion to the time taken for deliberation or for choosing between several words simultaneously suggested by the "call-word". Indeed Galton intimates that his method lays bare the habitual ruts of thought in a way which exposes mental character to an often embarrassing extent. In the way above described, and by having one long familiar with the subject to control him, as far as it was possible to be done for this purpose, A. B. was caused to react on 40 words in the normal, and then on as many more in the abnormal state, reversing this order *(i.e.*, pronouncing to the subject in the normal the same list of words that had before been given in the abnormal state and *vice versâ)*, at the next sitting, three or four days later, and numbering each word and series on the revolving drum in correspondence with the order of words in the lists, so as later to connect with each reaction its time.

The list comprised about 340 words, yet the simple observations, though more numerous than those of either Wundt or Galton, seem to the writer far too few to warrant any definite inferences as to the question chiefly contemplated at the outset, *viz.*, What are the laws or categories, and what is the time of the various kinds of association in the normal and abnormal states respectively. Another negative result was that, except in time, no greater difference appeared between two successive reactions from the same list of words

[1] *Brain*, July, 1879, p. 149, *et seq.*

[2] Dr. M. Trautscholdt, in Wundt's *Philosophische Studien*, i. 2. s. 229.

whether the subject was in the same state during both series or in the normal state during one series and in the abnormal state during the other. An exception to this generalisation, however, may be noted in the case of a third finical subject who affected latinisms in the normal state, responding, *e.g.*, to the series 'saw,' 'drive,' 'file,' 'church,' 'pew,' by 'divide,' 'advance,' 'wear away,' 'clergyman,' 'occupant,' respectively when normal, and by 'board,' 'go,' 'nail,' 'pew,' 'sit,' when hypnotised. In both states in all subjects a strong tendency was noted, amounting to at least 24 per cent. of the whole number of reactions, to follow the sentence-order in associating words. 'Sit,' *e.g.*, was responded to by 'down,' 'eat' by 'enough,' 'late' by 'come,' 'rail' by 'road,' 'lag' by 'behind,' 'paint' by 'brush,' 'kill' by 'don't,' 'sleep' by 'sound,' &c. Next in frequency, both in the normal and in the abnormal series—amounting, as approximately as such classification could be made, to 14 per cent. of all—were what may be called the associations of common life: *e.g.*, 'speak' 'read,' 'hot' 'cup,' 'toe' 'foot,' 'sleep' 'bed,' 'write' 'pen,' 'sun' 'moon,' 'dine' 'supper,' 'fat' 'tallow,' &c. Another category of some 8 per cent. is alliterative or rhythmic: *e.g.*, 'slice' 'lice,' 'rage' 'range,' 'gape' 'gob,' 'dough' 'door,' 'scrap' 'strap,' 'just' 'joint,' &c. These seemed to predominate slightly in the abnormal state.

This latter state, however, presented some unlooked-for peculiarities. Nearly 5 per cent. of the words given in the abnormal state elicited no response whatever, the subject apparently not hearing them, though they were spoken distinctly and near his ear. These words—'sit,' 'wish,' 'tie,' 'tell,' 'right,' 'hate,' 'skin,' 'throw,' 'thick,' present no obvious difficulties, and were responded to readily enough in the normal state, as indeed were some of them which chanced to be repeated in a subsequent abnormal state. Again, 2 per cent. of the words in the abnormal state were simply repeated, as naïvely as though that were what was required, although this was not once observed in the normal state. A tendency was also observable to repeat a responsive word several times in a series of reactions, whenever it would fit, and in the case of one subject when it was quite inappropriate. In a series of 23 words, *e.g.*, 'change,' 'break,' 'run,' 'hold,' 'speak,' were all responded to by '*fast*'. In a series of 18 words, 'wife,' 'drink,' 'lug,' and 'lick' were all responded to by '*up*'. The second subject responded to 'pound,' 'bite,' 'toil,' 'kick,' 'stick,' 'send,' and 'our' alike by '*hard*'—these words occurring within a series of 26 words. Again, 'stoop,' 'rest,' 'low,' 'verb,' 'fault,' 'hatch,' were all

responded to by '*high*'. Occasionally no coherence whatever between the call-word, and the response was apparent in the abnormal state—*e.g.*, 'Alps' 'me,' 'art' 'you,' 'glass' 'boot,' &c. Not unfrequently the articulation was imperfect, and the abnormal reactions were so quick that sometimes the latter part of the word was not heard. 'Sword,' *e.g.*, was understood '*sew*,' and the response was 'needle'; 'ripe' was heard as '*rye*,' and the response was 'wheat'; 'like' was heard as 'light,' and the response was 'dark'. When several words are pronounced alike, or when one word has several connotations, the tendency was observed in both states to prefer the more material or sensuous meaning except when this tendency was overruled by the influence of analogy with other words near it in the series. When, *e.g.*, the preceding word was 'post,' 'not' was apperceived as 'knot,' as appears from the reaction '*pine*,' but when '*will*' had just preceded, 'knot' was taken as 'not,' and the reaction was 'why'. The words 'lie' and 'kill,' happening to come near the end of one abnormal series, seemed to excite A. B. as if they caused dreams of scenes in which he was concerned with actions represented by these words. Finally, it may be mentioned that in all the word-reactions, as in all the simple reactions, the reaction-time was shorter and more uniform in the abnormal than in the normal states.

In discussing these results, it seems first that fresh ground is gained for confidence in only those methods which enable all phenomena of this class to be studied without taking the character of the subject into account. It is true that no one can define the field for possible conscious imposition and fraud with absolute certainty, but on the other hand the best men are very easily deceived, and when the experience to be interpreted or narrated presents anything unusual, the strongest subjective conviction is anything but scientific. When, as in the Breslau researches, the axes of the two eyes are made to diverge, one to roll up and the other down; when all the complex phenomena of colour-blindness tested by the subtlest methods are consistently produced in one eye, the other remaining normal; when a normal eye suffers an accommodation-cramp so intense as to read very fine print at a distance of an inch from the anterior surface of the cornea; when ignorant working-men write backwards or pronounce long sentences which are repeated to them in a foreign language; and when the sense of dizziness from whirling about seems mainly abolished,[1]—the reality of an

[1] See Dr. Beard's letter in an article on "The Sense of Dizziness in Deaf-mutes," by Prof. W. James, *Amer. Journal of Otology*, iv. (Oct., 1882), 15.

abnormal state of some kind cannot be disputed. So, too, when A. B. can and does reduce his reaction-time as in Table I. at the first sitting, and can gaze at a large sunny window with dilated pupils for 13 minutes without winking, and produce the other self-consistent and uniform results given above, we consider the test of the reality of an abnormal state of some kind to be better than the unflinching endurance of torture which we know to be possible with a strong will, or even than the testimony of the best men or the most respectable citizens.

The general phenomena of Attention are familiar to all both subjectively and in its more common physical effects. It is well known that the reproduction of anything similar to an expected object facilitates our perception of it, as in the oft-mentioned facts that we recognise a new word quicker if told what language it is in, or a very dimly remembered face if told where we have met it before. Expectation develops many and often unsuspected aids in apprehension, while the new or unexpected always meets more or less opposition or delay in reaching consciousness. Since the suggestive dissertation of Herbart[1] in 1822, attention has come to play a very important *rôle* with psychologists, with whom it has had much to do in undermining the theory of faculties, until, as is known, with Wundt it may be called the central psychic category. Though not, as several writers have lately asserted, entirely identical with apperception, which Steinthal and Lazarus make no less central in folk-psychology, it has many elements in common with it. Thus in the literature of philology and physiology, as well as in insanity, popular delusions, and education, it has come to occupy an important place. Dr. G. Buccola has lately shown[2] that cultured people react more quickly than the uncultured, and that the personal equation of idiots and the insane (who can rarely be hypnotised) is greatly prolonged. This latter he thinks due to distraction or defective power of voluntary attention, and he believes that only men of more or less mental power can be hypnotised. Dr. Beard,[3] who has

[1] *De Attentionis mensura causisque primariis*, in *Werke*, vii. 75.

[2] "La durata del discernimento e della determinazione volitiva," in *Rivista di Filos. scientif.*, i., 2, p. 19.

[3] See *Nature and Phenomena of Trance*, by G. M. Beard, M.D. (G. P. Putnam's Sons, N.Y.) On p. 31 is a list of the author's many publications on this subject. See also *Muscle-Reading* by same author, 1882. For further notices of the more important literature on this subject see Appendix to Prof. Ch. Bäumler's *Der sogenannte animalische Magnetismus oder Hypnotismus*, Leipzig, 1881. Also a still fuller list in G. P. Möbius, *Ueber den Hypnotismus*, Leipzig, 1881.

distinguished very clearly between the positive and negative field of hypnotic attention, compares common consciousness to a large chandelier with all its jets lighted, but burning dimly, while inducing the hypnotic state is like turning off all the jets but one, which burns all the more brightly. If these general views be correct, no one can deny its great importance for all departments of psycho-physics and education; for if psychic processes, or any considerable number of them, be reactions "delayed only for compounding," it suggests no less a problem than that of a virtual prolongation of human life, so far as it is made up of these reactions. Upon the Attention-hypothesis a great number of neural disorders are seen to be only exaggerations of states familiar to every normal mind, and we are enabled to throw overboard at once a formidable array of names and hypotheses which have long obscured and discredited facts of this order, while the field of experimental psychology is opened up still wider to those who have learned to respect and apply its methods, with no necessity for neurological science to "begin over again," as Claude Bernard is reported to have sadly feared during his last days on hearing of the first of the recent German studies of hypnotism.

The observations made on A. B. certainly do not favour the conjecture of Bain that "action from within is suspended" in this state, nor the theory of Dr. Hammond of New York, that the function of the cortex is "eliminated". It is true we cannot make even such approximate estimates as Exner assumes of the time of conducting impressions and impulses in the spinal cord;[1] but, making the most liberal allowance for spinal as well as for peripheral time, we find on record some 18 hundredths of a second in the normal and 10 in the abnormal state remaining as central or reduced brain-time, concerning the partitions of which, between the basal ganglion and the cortex, we have extremely few data for inference. The fact that, with certain subjects, stimuli, if sudden or monotonous, like abnormally long fixation, instead of causing irradiations of excitation in the nervous centres, according to Pflüger's law, or otherwise, are not diffused but accumulated and intensified, causing, *e.g.*, as in Charcot's subjects, muscular contractions to become permanent, and producing sometimes circumscribed tonic rigidity, naturally suggests that the normal power of resistance in certain vaso-motor centres controlling the blood-

[1] As is shown in Du Bois Reymond's *Archiv*, 1879, "Ueber die Abhängigkeit der Reactionszeiten vom Ort des Reizes," by J. v. Kries and G. Stanley Hall.

supply of the brain is impaired, allowing increased vascularity, brain-blushing, or local erethism, which may also be assumed in explaining what athletes call getting the second breath, the blood being proportionately diminished in other parts of the brain. On this hypothesis an hypnotic subject would be one with an irritable habit of excessive action in these centres. Rosenthal's observation[1] that nitrate of amyl arrests hypnotism, is not inconsistent with this hypothesis, which on the whole is more favourable to the theory of restricted diffusion of stimulus within the highly vascular centre than to the automatist's view that only lower centres are active in the hypnotic state.

Behind the circulatory is of course always the molecular aspect of the cerebral changes, which Tamburini thinks should be chiefly regarded in judging the various degrees of this state from gaze to coma. Except Wundt's inference from his studies of reflex action, that the excitatory is preceded by an inhibitory stage of cell-action, and the fact that the vigour of cell-action, and perhaps the evolution of heat, does not coincide with the increase of blood-supply, very little is known here. In the dread of admitting the study of psychoses into physiology, we may speak of the "lability" of passion and irrepressible volition, or of the erethism of temper and that too with real and increasing advantage; but in the study of our central question, *viz.*, what were all the causes which enabled our subject to reduce his reaction-time from 18 to 10 hundredths of a second, it simply shows lack of intelligence to ignore the psychological or subjective side of the problem.

From this side science, and indeed apperceptive as distinct from associative thought in general, may be described as the power of correlating and intensifying certain impressions by dichotomising and crowding off irrelevancies. Yet if certain large tracts of thought are sunk in forgetfulness or torpid indifference, others are apt to be uncritically over-estimated or morbidly dwelt upon often up to the point of illusion. If the sphere of ideas is unnaturally restricted or morbidly contracted, selfishness and egoism or mono-ideism, often deepening into positive insanity, are liable to result. Certain concentrative kinds of mental alienation—and our age of specialities seems particularly to favour forms of monomania —coexist with permanent or transient species of inhibition of normal motor reactions or various degrees of anaesthesia. The depth of sleep and abstraction may be measured by the

[1] See *Centralblatt für Nervenheilkunde*, 1882, p. 89.

intensity of the sensuous stimulus required to arouse us from them, and when a department of the various stimuli which, as they crowd in along all the sensory nerves, keep the various psychic elements awake, ceases to affect consciousness, its equilibrium is disturbed, and illusions are unrepressed. Anxiety in "labile" dispositions is apt to sharpen into localised pain. If we concentrate attention upon an image at the centre of the field of vision, its peripheral tracts seem to grow dark, as indeed does the centre itself with some observers, when the attention is fixed on a point in indirect vision. When A. B. was directed from the work of reaction to another entirely different subject by the operator, flushing, palpitation, and powerful psychic excitement were caused; he must always be roused into the normal state and again hypnotised before impressions of a new genus were given, as indeed was generally the practice with the exhibitor whom he attended, while within the limits of that genus great mobility of attention was common. All these facts and more or less current conceptions are in the general line of the hypothesis of a tonic cramp of the attention. So, too, are common curative and prophylactic measures, *e.g.*, preoccupation, interest and exercise for the idle, the same and music for the insane, rubbing a sore spot on the skin to dissipate the painful irritation, blowing in the face or a sharp tap upon a part of the body not concerned in the action, as a means of rousing from the hypnotic state, &c. Possibly, too, the case of another hypnotic subject who was able to bring down his reaction to 27 hundredths of a second in the normal, and only to 54 in the abnormal state, may be accounted for by assuming that the work of reacting could not with him be brought out of the negative field into the focus of attention. Five abnormal reactions of this second subject were excluded because delayed over an entire second. The attention of this subject appeared to be too concentrated on the person of the hypnotiser to fully comprehend the action desired.

But while the attention-theory has much explanatory power, and may enable us to regard many abnormalities and neural disorders as only exaggerations of states familiar to every normal mind, and while it enhances our conception of the power of the mind over the body, it is time to remember that there is yet much obscurity and confusion and great inadequacy about it. Shall we say that the hypnotised animals of Kircher, Czermak, and Preyer were suffering not from fear but from an abnormal concentration of attention in which animals have been thought to be deficient? Do hibernating animals

and the fakirs, who present phenomena which Braid and others since have regarded as belonging to the same category, simply hypnotise themselves, and do the East Indian ecstatics, and even hibernating animals, fixate their navel in passing into trance only because it is at a convenient distance for easy accommodation, and because they have not one of Heidenhain's buttons at hand? In cataleptic states, as has been lately shown by Rieger,[1] contractile energy is more evenly distributed between flexor and extensor muscles than in ordinary motion, antagonistic muscles being stimulated at the same time. Again, how shall we explain the imitative diseases which Hecker has described as psychic pests, and which present so many elements in common with hypnotism? It has been said that not only another's yawn, but even opening a pair of tongs will cause yawning, while if we bethink ourselves this stimulus is ineffective. When the hypnotic subject pronounces long foreign sentences correctly after his controller, &c., is the attention turned on, or is the action purely automatic and unconscious; and does hypnotic colour-blindness fall within the positive or negative field of attention? When, *e.g.*, a hand is made insensitive to pain, is it due to abnormally intense inhibition of sensation or motion by consciousness, or is it better conceived as an entire detachment and vagrancy of attention from consciousness, of which it is commonly conceived only as a concentration. Does life cultivate the mind only in spots or nodes, and are these so imperfectly bound together by associative and apperceptive processes that special stress upon one of them causes it to isolate itself still more till the power of self-direction is lost, and devolution and disintegration slowly supervene? Ablation of the cerebral hemispheres, as is well known, makes some animals hypersensitive reflex machines, as are some hypnotics, but surely this must destroy any rudimentary power of attention the animal may possess. Consciousness seems to be of many degrees, and total unconsciousness in men is probably rare even in syncope, coma, &c., and can of course never be proven—a matter of much importance for forensic medicine; and when our hypnotic subjects forget their names and cannot be made to recognise the presence of wife or husband, shall we assume without further question a concentration of consciousness in some other direction? Inhibition is often active as well as

[1] See "Ueber Hypnotismus" in *Sitzungsberichte der physik-medic. Gesellschaft zu Würzburg*, 1882, s. 31; also, "Ueber normale u. kataleptische Bewegung" in *Archiv für Psychiatrie*, xiii., 2, 427.

voluntary, and it is not conceived as merely the negative side of a concentration of psycho-physical energy. What is wanted now is the careful and prolonged *psycho-physical study of individual cases* both of hypnotism proper and of allied states, including even hysteria in its myriad forms. If Attention be an essential factor in these abnormal states, it is evident that they take on as countless forms as it has directions and modes of movement and concentration. But we cannot consider this conception of hypnotism as by any means established as yet. Not only does it as yet fail to explain many facts, but it can hardly be brought to do so without quite radically reconstructing the notion of it familiar to common consciousness, and thus weakening its explanatory power—in some such way as Schopenhauer, Hartmann, Hegel, Fichte, and others, in trying to include the universe under the single categories of Will, Unconsciousness, Reason and Ego respectively, have confused these important conceptions. However it may be in other domains of philosophy, the psychologist who confesses to any one predominant rubric or system is an idolater, in whom abnormal mono-ideism has already begun its negative as well as its positive concentrative mischief.

To the consideration of some of the above problems and difficulties we hope to return later, in the light of studies already in progress. Meanwhile the writer desires to express his obligations to Professor H. P. Bowditch, of the Harvard Medical School, in Boston, for placing the resources of the Physiological Laboratory at his disposal, and for valuable aid and counsel.

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November 6th, 1882.

III.—ON SOME FUNDAMENTAL PROBLEMS IN LOGIC.

It is rather depressing to find that in spite of the rapidly increasing number of works on Logic, we are apparently no nearer a satisfactory solution of certain fundamental logical problems than we were some time ago: the proper scope and functions of Logic, its relation to Psychology and Metaphysics, the method of establishing or determining its first principles, and especially the true relation of formal to material reasoning,—all these seem to offer as much debateable ground as they ever did. Hence our most pressing need at present appears to be, not more *Logics*, but a thorough and comprehensive 'Prolegomena Logica' or, as we might prefer to call it, a Philosophy of Logic. Such a work should not only put forward a consistent theory with regard to each of the above topics, but should undertake to analyse, compare, and criticise carefully the various doctrines in regard to them which have already found more or less wide acceptance.

We might think that, without entering upon any such long and difficult task as the above, much good work might yet be done within the commonly recognised sphere of Logic, in the development of details, in the elaboration and extension of subordinate branches of theory; and no doubt it may. What we actually find, however, in most logical treatises, is not this separation of scientific details from philosophical problems, but an intricate and perplexing intermixture of them. Each writer introduces a more or less hasty and fragmentary philosophy of Logic of his own, and makes the rest of his work as closely as possible dependent upon it; problems are discussed within the science and as digressions from the main topics, which would be much more satisfactorily treated as outside it or introductory to it. And such discussions are very partial, for while logicians take up now one and now another of these topics, wherever support for their special theses appears capable of being derived from them, they arbitrarily exclude others which seem to be no less important to clear and sound logical theory. Professor Jevons, for instance, declines to argue the point whether logical axioms or first principles are primarily laws of thought or laws of things, while he gives us a chapter upon the "Philosophy of Induction," in which he maintains that all inference consists simply in rendering explicit what is

already implicit in thought, and that there is therefore no fundamental difference between Inductive and Deductive reasoning; others, however (see, *e.g.*, Mr. Keynes, MIND XIII., 120), would make the fact that the principles of Formal Logic are necessities of thought, its distinctive characteristic, and that which must for ever divide it from the Logic of Induction. Again, in the development of the symbolic instruments of thought, Jevons dispenses with a discussion of the relation in which language, or symbolism generally, stands to thought itself; while according to the view put forward by Mr. Keynes in MIND XV., 362, "On the Position of Formal Logic," this appears to be a matter of prime importance. By all this and by much besides which will readily suggest itself, the great need of such a Prolegomena Logica as that described above, is evidenced. We shall never see our way through these puzzling problems until we have before us a careful and comprehensive philosophical exposition of them; and in order to this the groundwork of Logic must be made a matter of distinct and critical investigation. It must not be hurriedly and partially dealt with merely in order to prepare the way for some special treatment of this or that special department of logical science; the aim should be to render plain the ultimate bases upon which the various theories already put forward, rest, and to effect if possible some reconciliation between them: we would fain believe that a deeper analysis of the facts would bring into good working harmony theories which now seem only to stand in each other's way.

In the meantime, however, while we are waiting for some great light to rise and shine upon us in a Philosophy of Logic, we are compelled from time to time to deal ourselves in a fragmentary way with certain of the problems which properly belong to this Philosophy, and which indeed cannot be satisfactorily treated in isolation. Although in this way we may make some progress, each attempted solution of a difficulty must lose greatly both in clearness and certainty by the fact that its fitting with the whole, of which it is but a part, is not apparent.

It is with such an explanation and proviso only, that I venture to call attention in the following pages to certain questions affecting the relative position and value of the Inductive and Deductive logical processes. These questions are *(a)* What are the essential characteristics of all fundamental criteria of inferred truth? *(b)* What is the logical value of the common distinction of Laws of Thought and Laws of Things? *(c)* What, in the last resort, are we to

understand by the terms Synthetical and Analytical Reasoning?

In both Deductive and Inductive logical processes we are chiefly concerned with the *general:* general propositions are usually put forward as the basis of the one, and as the goal of the other; and hence Mill has warmly maintained that the attainment of the Inductive goal ought to be regarded as the indispensable condition of the existence and value of the Deductive arguments. So we will first examine the basis of that method of inference which is thus presented to us as logically prior. We will ask, what is the fundamental criterion of the truth of our inference when we arrive inductively at a general proposition?

In the replies commonly given to this query there is some confusion: now, it is answered vaguely, the Uniformity of Nature; now, more precisely, the Law of Causation; and again, Particular Experiences; while in regard to all, appeal is made equally to the authority of Mill's *Logic.* Now although Mill's treatment of the principles of Induction is somewhat confusing, he has himself pointed out that the Law of Causation, being a general proposition, requires like all other general propositions inductive proof, and he throws us back for this proof upon Simple Enumeration. I conclude therefore that there is to be found in Mill, final justification only for the view of those, who hold that all the evidence we can have for our material inferences, lies at bottom in particular experience. Although in appearance Inductive logicians may be standing fast upon some general principle or axiom, yet when pressed in regard to the value of this, they invariably fall back upon particular intuitions merely, as their real ultimatum. Let us ask then, whether we can be justified in regarding a general proposition as being *proved* by particulars alone.

That particular experience may suggest a law, or account psychologically for the belief of it, we may allow; but this is quite a different thing to allowing that in any usual or consistent sense of the term, it *proves* the law. When we talk of the proof of a proposition we do not mean merely anything which disposes the mind to accept it, for this an emotional bias might do. We mean something more. When one thing is proved by another, its truth is held to be involved in or dependent upon the truth of that other. Now Material Inference, by the school we are at present considering, is acknowledged to be a synthetic process: in it we are said to proceed from knowledge of one thing to knowledge of another, *by reason of, or on the ground of, the first knowledge.*

This latter clause serves to distinguish the process from a synthesis of mere imagination,—an arbitrary addition of thought to thought; and the main practical function of the Logic of Induction is just to enable us to draw the line firmly and clearly between these two. But if the existence of one thing is regarded as a ground or condition of the existence of another, it is implied that some fixed definite relation obtains between them,—that some accredited law of the things has become a basis of *conscious* inference in regard to them. That A is B, here and now, is, however, a judgment fundamentally disparate from the judgment, that this A, or some other A, will be B the next time we meet with it, or always. The one is an analysis of a particular intuition; the other is a synthetic judgment with regard to what is extra-intuitional; it is a proceeding from the known in the sense of what is intuitively apprehended, to that which is unknown;—we find a particular fact and we conceive a general law. And all attempts to make these particular facts do duty for general laws appear to proceed on that most fatal and yet most alluring of all conceptions, that analysis can be made to do the work of synthesis.

A way out of the difficulty which presents itself to some,—to Professor Jevons for instance,—lies in maintaining that, although particular facts do not and never can prove general laws in the sense of rendering them absolutely certain, yet that they may render them more or less probable, and that this suffices for our purpose. What however is the meaning of this "rendering more or less probable"? Either it must mean, I think, that particular experiences can prove proportional propositions, though not universal ones; or else it must refer merely to the psychological fact that we are *disposed*, though not obliged, to expect repetition of a frequently observed order of phenomena. The first interpretation is open to all the objections which have already been urged against the power of particulars to prove universals, for proportional propositions are only a species of universals; the second is a reference to psychological facts for confirmation of logical principles,—a procedure which, having regard to its frequency, we must here carefully consider.

When Formal Logicians appeal to Psychology they call to their aid *necessities of thought*, but Material Logicians usually lay hold only upon *tendencies* of judgment, *force of association*, and so on. In support of the principle of Uniformity we have the fact brought forward, that after long continued observation of a certain order of phenomena we do

actually expect its recurrence, whether we can conceive the subversion of the order or not. This fact that beliefs have been generated by experience is one of the most important in Psychology; and it is there generalised into a law of mind, just as in the physical sciences observed relations between phenomena are generalised into laws of those phenomena. But to substitute this law of mind for the principle of Uniformity of Nature would evidently be only to substitute one generalisation for another: or if, neglecting the generalisation, we regard only the particular psychological facts from which it was drawn, we are then merely substituting an appeal to particular internal intuitions for an appeal to external: and neither procedure can help us at all; both are but repetitions of the old methods under a new guise. And we may further ask, what claim has any mental law to be regarded as in any sense a ground for acceptance of a law of things? For according to the Empirical School, the permanence of the mental order is dependent upon the permanence of the physical order; hence to argue from the observed constancy of the one to the universality of the other, is to argue in a circle.

There remains however yet another alternative: suppose that after all, although to the great distress of most Material Logicians and to the exceeding joy of most Formalists, it turns out that the principles of Induction are necessary judgments,—that they are general intuitions; can we not then find in a law of thought that proof of a law of things which we need? The doctrine that the principles of Induction are necessary has already been maintained by G. H. Lewes, Mansel, and others; and have we not here an easy way out of our difficulties? We can proceed to test laws of nature not by an appeal to mere laws of association, but by an appeal to necessities of thought. We can prove the general proposition, All A is B (here, let us say, = All events have a cause), by pointing out simply that in this or that attempt to conceive an A which is not B, we do not succeed. That A is B, we then argue, is a law of mind, and being a law of mind it must also be a law of things, at least so far as we human beings are concerned. Now there are two assumptions in this argument. The first is similar to that which we have already criticised in regard to inferences from association: it is, that the observed inability to connect A and not-B establishes a *law*, not of things,—as it happens—but of thought; we believe, on the strength of our particular observations, that there is a fixed relation in thought between A and B such that not only we but all men always will find

themselves unable to subvert it; and this judgment is an inference and a generalisation exactly similar to those to escape from which we rush to it. The second assumption (one which is indeed involved in the first) is, that no divergence shall ever arise between what we experience and what we feel ourselves compelled to think or judge,—that intuition shall never be contradictory of necessary inference. To some this may scarcely appear to be an assumption; yet others have argued that we often believe the inconceivable, and that things at one time inconceivable may become conceivable by the repeated effects upon the mind of new experiences; and such experiences must at least *begin* by being contradictory to a so-called necessary conception. Mill thought (rightly or wrongly), that if we were transferred to a world, where upon the addition of two objects to two objects we invariably received the visual and tactual impressions of five objects, we should come to conceive $2 + 2 = 5$ just as easily and even necessarily as $2 + 2 = 4$. This may of course be debated, but I doubt whether it can upon Mill's own premisses; and most of those who take a contrary view to Mill, and hold that necessary judgments are necessary for ever, should in consistency look upon mind as constitutive of the objective world after Kantian fashion, and not upon the world as formative of mind after the Spencerian. And surely we are not to be dragged into the depths of Transcendentalism, before we can fix upon a criterion of truth, in the every-day sense of the term.

Hence we arrive at the conclusion, that we can no more prove our criteria of material inference by an appeal to *necessities of thought*, than we can prove them by an appeal to *tendencies of thought:* in both cases we are attempting to prove a law of nature indirectly by an appeal to certain particular internal intuitions, having failed to prove it directly by an appeal to those particular external intuitions to which it primarily relates; and the only result seems to be, that we thereby disguise from ourselves the fact that we cannot prove it at all. These principles of Induction must be general synthetic propositions, and since these are not reducible to or provable by particular experiences of any kind, they must stand on their own strength altogether; we must say of them simply that they are ultimate beliefs: if people find belief of them necessary, well and good: but if not, we must beg them as postulates: and it will be part of the task of the philosophical logician, so to elucidate and formulate his principles, that the granting of them will be as far as possible unhesi-

tating. Doubtless he will not be altogether indifferent to this question of necessity, though its interest for him will be different from that which is generally supposed. Since that which people necessarily conceive they are very ready to believe, the logician will be saved a great deal of trouble if he can succeed in exhibiting his first principles as necessary beliefs; but his attempt to do so must not be confused with an attempt to prove them. The theory of Evolution might lead one to anticipate little opposition on the part of the Empirical School of thinkers to a representation of the principles of Induction as necessary. The constancy of certain relationships among phenomena may produce, they hold, an inability to conceive them as otherwise related; and those followers of Mr. H. Spencer who allow necessity to the judgment that two straight lines cannot enclose a space, need not feel much put out if required to concede the same in regard to the Law of Causation. In any case, it would seem that, as logicians, the question of necessity or non-necessity need not vitally affect them. Mill, however, was troubled, we know, by the idea that if the existence of general intuitions were admitted, his Logic of Induction would be at an end; and there are others now-a-days who share his terror. Let us examine the true cause of it.

When it is pointed out that Formal inferences depend upon Laws of Thought, and Material inferences upon Laws of Things, the fact to which at bottom attention is called, is, that the principles of the one are necessary, while those of the other are not: and it appears that if ever this distinction is set aside, the one great and sufficient barrier between the Logic of Induction and the Logic of Deduction will be broken down, and the former become swallowed up in the latter. If the criteria of inductive inference are necessities of thought, they will be accepted as soon as propounded, and afford no scope for debate or explanation: while the subsequent logical process seems to consist entirely in deduction from them as major premisses. Hence the office of the Inductive Logician would no sooner have begun than it would cease to be; he would have to propound his principles simply, and then take himself off the ground. But we may ask him critically whether after all the case is much mended, supposing we allow him in regard to his first principles even all that he has hitherto claimed. For is it not true that, according to the common theory, the very first inductive effort,—the establishment of a comprehensive law of nature,—is in strictness the beginning and the end of all that it is appropriate to the purely Inductive Logician to do? As soon as Mill has obtained, as a

criterion, the Law of Causation, it is plausibly argued that all the subsequent development of his so-called *Inductive* Methods (except in so far as they are methods of observation and discovery) is a purely formal and deductive task. And whatever be our principle or criterion, the same may be said; the very fact of its generality seems to put an end to any but a syllogistic use of it. It is the dread of this speedy consummation which has already led Inductive Logicians to try to palliate or in some way to detract from the universality and dogmatism of their first principles; they almost seem to glory in the fact that they do not quite believe them. Ingress into the deductive sphere, however, cannot be avoided by any mere casting of doubt upon principles; if we mean to use these as criteria, we must state them in a general form and reason from them as major premisses; and any surmise we may cherish as to the possibility that after all our conclusion may not be sound, is nothing to the point. Even if we refuse to state our principles as universal propositions, and prefer a particular major, our reasoning from it is still deductive in form. In representing Induction as Inverse Probability, Jevons aims at supplying us with particular or proportional propositions for our starting-point instead of with universal ones, but he does not thereby prevent,—nor does he apparently intend to prevent,—the subsequent process of inference from being essentially formal and deductive.

We now face the question, wherein after all does the distinction, which at first seems so marked, between Induction and Deduction lie? Does it lie in the fact that the principles of the one are analytic, and those of the other synthetic judgments? Or is it not possible that both may be synthetic? That the axiom of syllogism is synthetic, is a doctrine not altogether unheard of: Prof. Bain maintains that it is a law of things and an inductive generalisation, presenting no essential differences to other fundamental inductions; and Mr. H. Spencer's account of the ratiocinative process would lead us to a similar view. Most Formal Logicians, however, assume it to be analytic; yet their general language in regard to the function and value of syllogism,—their view that by its means we attain positively new judgments,—may well raise doubts in our minds as to their true meaning. They add, indeed, that it deals only with the necessary relationships of ideas, and aims only at introducing consistency among ideas; yet they certainly do not mean to say that the relationships are such as have no counterpart in nature; they may be laws of mind, but they are not the less laws of things also. Still, it is argued, the newness of

the judgments which form the conclusions of formal reasonings, consists only in the fact, that in them is rendered explicit that which was before implicit. Now what does this phrase, "*rendering explicit what was before implicit*," really mean? Perhaps we shall find that it is accountable for much logical darkness.

The word "implicit" may here bear two interpretations, which are unfortunately apt to be confounded. It may mean either implicit in language, or implicit in thought: "implicitness in language" means that the knowledge is possessed in a symbolic form merely, and waits to be interpreted into actual thought; and this is scarcely the meaning which Formal Logicians are willing to accept: "implicitness in thought," however, seems to mean that a certain judgment concerning a given subject, though not actually made, was a necessary one. But this to some may appear paradoxical. Wherein, it may be asked, lies the necessity of the conclusion, if, being in possession of the premisses, we have not actually made it? It has been argued by some, that apart from symbolism all Logic must cease or sink into Psychology, if the inferences it deals with be declared necessary; for all that then remains to be done, it may be said, is to describe the way in which we *do* reason, and not the way in which we *ought* to reason. But this cannot be decided off-hand; Kant held that there might be necessary judgments which yet were not necessarily made; all seems to depend upon whether the judgments are analytic or synthetic. If in regard to given phenomena A and B the necessary judgment be synthetic, we may argue that, although when these are presented together and reflected upon, it may be found inconceivable that they should not be related after a certain manner, it may yet be quite possible to think of either alone without any reference to the other; and when B and its relation to A are out of mind, we may form judgments concerning A which will be inconsistent with that relationship, and hence require a memorandum of it to which we must constantly refer. Such memoranda of the most important and universal relationships of phenomena may appear to be exactly what all logical axioms supply, and their use will be to guide us in the making of inferences which, after all, may justly be described as necessary. To say, however, in such a case as the above, that in relating B to A we had only rendered explicit what was before implicit, would be very misleading. The implicitness here could only refer to the *possibility* of our becoming aware of the necessity of the given relationship. In bringing any valid synthetic

principle to bear upon a subject, we are adding to our knowledge of that subject; and if the subject be a matter-of-fact, the principle is to be regarded as a law of nature. So if it be maintained that the axiom of syllogism is synthetic, like those mathematical axioms to which it is so often compared, it does not appear that the movement of thought in syllogising can differ in any essential respect from the movement which is supposed to take place in material reasonings. Why, we might well ask, should the principles, "All events have a cause," and "All things co-existing with the same thing (or same part of a thing) co-exist with each other," be logically distinguished? What is the force of saying that the one enables us to attain new knowledge, while the other only enables us to arrive at new judgments? Apparently there is none. Nor can we make use (under the present hypothesis) of the old distinction of Matter and Form; for Form would now mean simply some universal relationship of things; and in this sense the Law of Causation might be said to relate to Form quite as much as the axiom of syllogism. So we have apparently only saved the doctrine of the necessity of the inference in syllogism, together with its implicitness, at the cost of fusing completely the Logics of Induction and Deduction. This result however is hard to accept; we are vaguely aware of some great gulf between the two Logics, and fortunately we are not obliged to give up our case until we have considered closely the remaining alternative, namely, that the necessity of inference in syllogism is not a necessity of synthesis but of analysis. We begin by asking, what under this supposition will be the force of the phrase "implicit" as applied to the knowledge obtainable from the premisses of a syllogism? Now we have seen that we can without inconsistency talk of a necessary synthesis which yet fails to be made; but how can we possibly talk of a necessary analysis which yet does not always take place in thought? The "newness of judgment" which results from syllogising, is generally said to consist in thinking together attributes which we had not before thought together. But if we had not before thought them together, how is our judgment analytical of previous thought? All analysis presupposes a corresponding synthesis, but here we are not supposed to find any previous synthesis which corresponds to our final analytical conclusion. And if we do find it, would it not appear, that apart from symbolic thought the drawing of the conclusion of a syllogism is mere idle tautology,—not the rendering explicit what was before implicit, but the repetition of a part of knowledge which was

before quite as explicit as it is now? If this be so, there is then no movement whatever of thought except in the retrograde sense of dropping out or neglecting some parts of our knowledge and retaining others. We seem to find here another instance of that confusion of analysis and synthesis which is for ever besetting human thought; judgments are spoken of as analytic, while yet at the same time they are regarded as making some contribution to thought. But Professor Caird seems rightly to maintain that the purely formal judgment is no judgment; it is mere tautology. We gain nothing whatever either for truth or for thought by saying A = A; and neither do we by saying AB is B, so long as we do not allow ourselves to pass to any B which possibly is not A. This judgment, however, AB is B, expresses, I think, the whole of the truth that is syllogistically obtained. To show this let us take as an example the old syllogism:—Men are mortal; Socrates is a man; ∴ Socrates is mortal. Complex conceptions are formed by the combination of two or more attributes, and any predicate which is universally affirmed of a subject may, if we like, be added to those which form its definition; and the affirmation of any predicate is in fact always a momentary introduction of it into the notion of the subject. Having realised the full meaning of the proposition, All men are mortal, our notion of man becomes—if we represent rational and animal by *a* and *b*, and mortal by *c*—*abc*; we have then only to add similarly this predicate *abc* = man, to the subject Socrates, *x*, and our conception of Socrates is then *xabc*: the further process of drawing the usual syllogistic conclusion, *x* is *c*, completely parallels that in which we judge AB is B, or, Men are animals. This conclusion is a mere repetition of a part of that which has been already thought; it is no new judgment so long as the content of the two premisses is kept clearly in mind, and not merely symbolically recorded. If we think the whole *xabc*, we think at the same time, in the very same act, each of the components as related to each other as parts of one whole; and it is only to this relation in regard to two of them that we call attention in the conclusion of the syllogism. We are not of course obliged to keep the whole of our knowledge in regard to any subject always in mind, and to prevent overburdening ourselves we may drop out a part of it, and think *xc* instead of *xbc*; but in thinking *xbc* in the premisses we have actually, that is *explicitly*, thought this conclusion *xc*. And I scarcely think that in a syllogism we generally do in thought drop out the middle term; the conclusion we carry away with us is rather,

Socrates—a man—mortal, than Socrates—mortal. In any case the fact of our not retaining all the knowledge we have got can scarcely be put forward as a ground for treating the part which is retained as a new judgment.

According to this, so far as thought itself is concerned, we need no axiom of syllogism at all; mediate inference becomes indistinguishable from immediate as regards the formal process. This indeed would seem to be implied by those who ground syllogistic inference ultimately upon the so-called Laws of Thought, All A is A, &c.; but according to the foregoing, these Laws are not really laws of thought at all; they are mere tautologies,—formal judgments, which as Prof. Caird says, are *no judgments*. So, in regarding the process in syllogism as analytic, we seem at the same time to be forced to regard it as idle. In apparent conflict with all this, however, we have the fact that in syllogising we do in some way make progress in knowledge, and very important progress too. The solution we would offer to this difficulty is, that the process in which the progress lies is prior to and independent of all the said formal principles. If both major and minor are synthetic judgments an advance is made in forming each separately, while there is a further advance in thinking them in conjunction. It is this latter point which I think has served to give the principle of syllogism an air of synthetic value. We know that we may go on indefinitely judging man to be mortal at one time and Socrates to be man at another, and yet never be aware that Socrates is mortal, because when we are thinking of Socrates's humanity, we have dropped out of memory the connexion of humanity and mortality; in order to get the whole, Socrates—man—mortal, of course all the elements which go to make that whole must be simultaneously presented. The recollecting however, at a suitable juncture, knowledge stowed away in memory, is a process with which no formal principle has anything to do; we can only say of it that it is an accident which happens more frequently to the intelligent. In getting the premisses of a syllogism we may say perhaps that implicit knowledge often becomes explicit, but this implicitness is only latency in memory. That however the entire value of Formal Logic consists in its pointing out to us certain methods of manipulating symbols by which deficiencies of memory and of mental grasp may be to a great extent overcome, is the conclusion which I hope we may now reach.

Suppose we are looking at some object and become aware,—it may only be by degrees,—that it is of a certain form, design, colour, &c.; our notion of it has then come to be that of a

certain tolerably definite cluster of attributes, and the larger and more definite the cluster, the more extended is our knowledge of it. Now what we do in syllogising is to cluster similarly attributes round a given subject; but the addition of them here takes place generally through an effort of memory or imagination, and not through an effort of observation. We may argue that as we do not, in perceiving the conjunction of attributes ABC, think we require a fresh observation or any reference to the axiom of syllogism in order to become aware that AB or BA, CA or AC, BC or CB, are conjoined, so neither should we hold that these constitute fresh judgments, when, the feats of memory being completed, we have before us the group ABC in mental presentation.

But the number of attributes we are able to predicate of any individual may be indefinitely numerous, and we cannot possibly introduce them all at once into our notion of the thing. And here it is that language, or symbols as systematised and employed according to rules given in Formal Logic, come to our aid. In a Sorites we may have forgotten every link of the chain but the last by the time we arrive at the conclusion; each link, however, is preserved for us in symbols; we have before us,—on paper it may be,—the collection *abcdefg*, &c., a whole of which each letter is a part, and we can then confine our attention to any two parts and interpreting them in thought, bear away with us the knowledge of their mutual relation. The importance of language in giving, in this and in similar ways, increased scope, facility, and system to thought can scarcely be exaggerated. But what it does for thought is what in a small way a calculating machine may do for the mathematician: the rules for working the machine are not mathematical axioms, and neither ought the rules for manipulating logical symbols to be regarded as expressive of fundamental laws of thought, though their relation to those laws may be very profitably explained. The Dictum or any other axiom of syllogism has value when regarded as a precept for the conduct of symbolic thinking only; but as such it may enable us to arrive at new judgments,—judgments which, moreover, we might never have been able to make without it. By manipulating symbols in a manner which duly represents the movements of real thought and preserves their results, we may, without thinking, arrive at conclusions which are exactly those which real thought would have yielded, but which nevertheless far transcend anything which thought unaided by symbols would ever have accomplished. Looked at in this way, Formal

Logic *may* be said to enable us to extend our knowledge of things, but this is not because it enables us to analyse our knowledge, but because it aids us in the performance of complicated syntheses: it shows us how to carry on by means of symbols a synthesis of syntheses to which thought unaided would have been inadequate. We have said that the so-called Laws of Thought were not properly speaking laws of thought at all; if we are to give them any psychological reference, we must say of them only that they are attempts at a description or explanation of intuition; to give them out as principles to which thought must conform, is to say that we must not intuite that which we do not intuite, or refrain from intuiting that which we do,—which is surely empty and absurd: taken as relating to thought-symbolism, however, they may serve as negative precepts regarding the employment of symbols; they may check us in making combinations of symbols which could not be interpreted into actual thought. An analytic *judgment* is, as we have said, no judgment at all, but an analytic *proposition* may be of use in calling attention to and preserving clearly in symbolic representation that which belongs to the correspondent thought. Thought itself is altogether synthetic; hence our logical first principles or criteria of inferred truth are all synthetic judgments. The sole aim of all logical methods and processes,—whether they be called material or formal, is to enable us to make sound new syntheses, and extend our knowledge of things. Formal Logic treated simply as an exposition of the methods of assisting thought-processes generally by symbolism, may fitly be regarded as a very important although completely dependent branch of General Synthetic Logic. This General Logic will comprehend all methods which can be *generally* applied for the bringing of new judgments to the test of fundamental principles,—or for the formation of such judgments as will evidently fall under the given principles. Supposing one of these principles to be Causation,—and be it remarked, we need not consider ourselves limited to one,—then all Mill's Inductive Methods, which have been accused of being deductive and formal, fall rightly within the scope of Synthetic Logic; they point out to us the best means of practically bringing new judgments into relation with a certain fundamental principle of synthesis. Similarly, if we start with any other synthetic principle,—say, for instance, with the third of Kant's Analogies of Experience,—it will belong to Logic to develop the general methods of applying it.

It might be well in conclusion to show what in accordance

with the foregoing must be the philosophical outcome of a logical treatment which, failing to distinguish clearly real thought from symbolic, ends by identifying all Logic with what has been called Formal Logic, and gives as fundamental principles of judgment precepts for the manipulation of its symbolic instruments; but the task would be too long to enter upon here. Those who agree with the above however, will readily concede that if, with Professor Jevons, we hold that all inference consists in rendering explicit that which was before implicit, and that the fundamental logical principle is that similars may be substituted for each other, then all thought becomes reducible to tautology or to mere verbal transformations.

In conclusion it may be well to sum up the chief points of argument.

(1) That all Logic is concerned with the development of general methods for the application of the criteria of inferred truth.

(2) That these criteria are general synthetic judgments, accepted in Logic as axiomatic or ultimate, and expressive of laws of things.

(3) That the fact of the necessity or non-necessity of these judgments is not one upon which the common distinction of Inductive or Material and Deductive or Formal Logic can be made to depend.

(4) That Formal Logic (so-called) is entirely concerned with the development of the symbolic instruments of thought, and that logical analysis taken in connexion with thought itself is unmeaning or idle.

(5) That, as a consequence, Formal Logic (more properly Symbolic Logic) is completely subordinate to Material: that Material Logic deals with all general methods of obtaining valid synthetic judgments; and that the sole function of Symbolic Logic is to provide an instrument which will aid thought in the accomplishment of extensive and complicated syntheses.

M. Martin.

IV.—"NATURAL RELIGION."[1]

It would be useless and impertinent to occupy space with any detailed account of a work which every possible reader of this paper must have read; and almost equally so to lavish praise on the spirit of peace and progress in which it is conceived, and on the well-known style, at once so weighty and so brilliant, in which it is executed. Its author's object is briefly this: putting "supernaturalism" and dogma on one side, to show that the "natural" Universe of facts and feelings supplies, in actual existence and operation, diverse elements of religion, which only need to be generally recognised for what they are, and to be consciously united, to make up *a* Religion—something fully worthy of that name, though in relation to the individual it might also be called Culture, and in relation to the world Civilisation. In dispersion, these diverse elements are comparatively weak; they are misunderstood, often held to be opposed to religion, and even mischievously discordant among themselves; one set of men neglects one of them and another another. Like the sticks of a faggot, they will find their true strength in union; and the possibility of their union is that they do, as a matter of fact, appeal to a common instinct and excite a common feeling, that of devoted self-forgetting admiration. This feeling, which is no other than worship, is specifically religious; and when it has found its true and complete Object, it will be a single Religion, embodied in a single universal church, "a great commanding union of hearts and minds," the invigorating influence of which will be felt in every department of life.

There can, of course, be no doubt as to what the elements must be. The same threefold division of the higher life has commended itself even to those who differ completely in their point of view with regard to it. With Plotinus, the three constituents are roads for attaining that elevation of mind in which the Infinite may be apprehended, and which "I myself," he says, "have realised but three times as yet, and Porphyry hitherto not once": they are that "devotion to the One," to the ordered unity of things, which is the mark of the natural philosopher; the love and moral purity of devout and ardent souls; and "the love of beauty which exalts the poet". With Goethe, they are the elements of

[1] *Natural Religion.* By the Author of *Ecce Homo.* London: Macmillan, 1882. Pp. viii., 262.

Culture; which he sums up as "Life in the Whole, in the Good, in the Beautiful". With our author, as we have seen, they are the sufficient elements of Religion; not, as in the idea of Plotinus, mere paths to an unknown god, but actual present possession and worship; and he discriminates them as concerned with the eternal laws of the Universe, with Humanity, and with Beauty, or more briefly as Science, Morality, and Art.

The argument by which this view is supported is naturally aggressive as well as constructive; and on the aggressive side it seems unanswerable. Parts of the same lesson have been taught in different, though not less impressive ways, by Mr. Matthew Arnold, Mr. Ruskin, and the Positivist writers; but it is here re-enforced with all the weight of the author's individuality. We can have nothing but admiring assent for his exposure of the pettiness and vulgarity of what he calls the lower life; and of the incapacity of the existing dogmatic religions to meet the needs of the higher life, by supplying a synthesis which may embrace all its elements in one "great atmosphere of thought and feeling". Nor can we differ as to the importance, for human welfare, of Science, Morality, and Art,—of a wider knowledge of Natural Laws, a wider love of Humanity, and a wider appreciation of Beauty. Our doubts begin when we turn to the positive additions which the present view of Natural Religion has made to the previous enlightened conceptions on these subjects.

And to glance first at the elements separately: the book gives the impression that its author has been habitually in very much closer contact with Morality, especially as studied in relation to history and politics, than with Science and Art. His picture of the scientific man, perpetually wrapt in contemplation of Law and Unity, is a very common ideal with those who appreciate the vastness of the leading scientific conceptions, and whose imaginations are impressed by the miraculous command of space and time which modern discovery has brought, but who have never been lost in the wilderness of laborious detail through which almost every investigation has to pass. The sunlit peaks are often better seen from a distance than from the myriad rough and tortuous paths by which they are actually scaled. And in a vast amount of scientific work, which is concerned with facts, there is much that is positively alien to the contemplation of laws; for the relation of facts to laws is perpetually not only obscure, but of a kind which could not possibly come within the purview of Science. Things simply *are* thus and thus, in behaviour or topography; the manner of their

having become so has been, of course, in every stage a natural process, as is the gradual accumulation of particular grains of sand in one particular heap; but to our eyes the greater part of natural process must be a myriad-fold accident, which might have given quite different results without any apparent violation of law. Even so large and interesting a law as that of natural selection everywhere presupposes individual variations which, for us, are strictly accidental. And as the course of differentiation is followed, and the attention narrowed down from the dominating laws of a multitude of species, which are constant under a multitude of conditions, to the uniformities prevailing among smaller and smaller groups, the facts which, for aught we can see, *need not* have been as they are, occupy more and more of the ground, and seem often as remote from deduction, and from any vitalising conception of law, as the streets and squares of a city which a cabman has to master. Even in the simpler region of inorganic matter, each of the most familiar chemical compounds has qualities which cannot be accounted for, which could not have been prophesied, and which can only be registered; and this would remain equally the case, if the wildest dreams of the mechanical theory were realised. But even apart from this, and supposing the peaks to be always more or less in view, can their effect upon us be reckoned on as an unchanging quantity? The conceptions which really open up new fields in the physical universe, such as the atomic theory, the correlation of forces, evolution—conceptions which have a very different effect on the imagination from the gradual filling up of these territories with subordinate laws and facts—are necessarily few and far between; and in their merely scientific aspect the mind adapts itself to them with really terrible ease; so that even the last and greatest of them will probably be not much more exciting to our grandchildren than gravitation. And the very search for larger and larger and more and more uniting conceptions, which has an exciting character of its own, is in some degree opposed to the excitement of novelty: to find anything in the future as exciting as the correlation of forces, we should have to find some force which could not be correlated; which in the interests of unity would scarcely be desirable. Supposing that the "vast unity," which our author himself admits to be "not yet discoverable or nameable," is really the God whom we seek to know, and supposing it were discovered and named, so that (to take the simplest department only) all known quantitative laws—those of the velocity of falling bodies, of the diffusion of gases, and a thousand

others—could be embraced in a single formula; it seems certain that interest in Nature would then and there begin to decline. The forward path would be closed; search and pursuit would have lost their great incentive; the imagination, set in motion (as our author describes it) by glimmering regularities and suggestive analogies, would find its function gone; and worship of the hugeness of the conception would fade away in an atmosphere of unaspiring familiarity.

Fortunately there seems at present no danger of the various forward paths converging on this paralysing goal; laws, like objects, stand side by side, *e.g.*, those of magnetic currents and those of heredity; and nothing like an all-embracing unity presents itself. But then in ceasing to strain after the idea of such a unity, we cease to find mere regularity so very imposing. How is invariableness of operation in Time a grander idea than mere size or distance in Space? of which latter one of the most imaginative as well as one of the ablest of recent men of science, the late Professor Clifford, declared his unmitigated contempt. He would certainly not have prostrated himself before the geological millenniums and the stellar distances, to which our author oddly points as bringing the greatness of God home to us by the fact of its having been actually computed. And a case like Clifford's would almost alone serve to show that, if there are occasions when these conceptions overpower us with a primitive unreasoning delight in which the utter relativeness of vastness in Space and Time can be forgotten, such experience is something to be just accepted in thankfulness, not to be reproduced at will, or pressed on others in the way of a truth or a duty; for the cold touch of reason may at any moment make it look both illogical and vulgar.

Against such objections our author would perhaps still urge the scientist's actual devotion to his employment. Luckily for us mortals, such devotion, in the sense of an ant-like impulse towards the day's work and a certain solid contentment in it, is far from rare. But ants must not despise one another; and while any busy man may feel for vapid idlers the sort of contempt here specially attributed to students of Nature, it must surely be exaggeration, in these days of specialism and division of labour, to describe the feeling of an average man of science towards an average man of business as "the pity of an apostle for a heathen". Our author scornfully regrets that men who might be scientific discoverers often "end ignominiously in large practice at the bar". It is of course a loss to the world when rare talents are wasted on work which does not demand them;

but that is not now the question. What we are considering is the worker's normal attitude towards the object of his study; and experience, I think, shows that the scientist's devotion to science is not normally devotion to an "infinite Unity" or a "beatific vision"; that in fact it partakes about as little of the nature of worship, and about as much of the nature of interested and healthy activity concentrated on successive limited points, as the intelligent lawyer's devotion to that extremely unscientific and un-unified object, the Common Law of England.

This somewhat unreal treatment of the pursuit and pursuers of scientific studies might more readily pass muster, as the outcome of the author's sanguine and powerful imagination, did it not directly connect itself with deeper flaws in his argument. Thus he perpetually urges on us the comparison of the scientific attitude towards Nature and the old Hebrew attitude towards the Eternal. But must not the religious sense of awe in the Jew have had at least some reference to the conviction, so strikingly and repeatedly expressed, that the ways of its Object were not only higher than his ways, but unsearchable, past finding out—a conviction which would scarcely enliven the occupation of the scientific investigator? Again, a great point is made, in this comparison, of the fact that knowledge of natural laws is the means of securing the maximum of safety and well-being in life, so that scientific men describe knowledge of Nature as of no less paramount importance than Jewish prophets described worship of God. But such knowledge the author himself represents as directed mainly to prevention and circumvention, and as resulting in a "transaction with Nature," a "propitiation" of a blind and inhuman Power, which might crush us but for our cunning and pliability. Surely, then, when one passes on from the special knowledge and the knower's application of it, to his general emotional attitude towards the Power itself, we shall hardly see there any very striking parallelism with the Jew's confident self-abandonment to an initiating, disposing, and protecting Providence. This further topic, however, of the inhuman or antihuman aspect of Nature, will find a more convenient place in the sequel; and from Science we may now pass for a moment to Art.

Here there is less to complain of, as far as the description of the worshipping attitude is concerned. In mere point of quotable authority, the gospel of Beauty has great advantages: Goethe and Schiller, the very word "Hellenism," are far stronger reeds to lean on than any supposed declarations

of scientific agnostics and sceptics "that their pursuit tends to worship". It is indeed beyond question that the habit of enthusiastic admiration is a much more real, natural, and necessary characteristic of artistic than of scientific activity; while for the world at large the difference is even more marked. For, in the first place, a very far larger amount of direct labour is necessary for really intelligent glimpses of the unities of Nature than for true enjoyment of some form of Art; and, in the second place, those persons are exceptional for whom, through a natural bent of mind, the admiring awe, say, in the conservation of energy can fill up and transform as many moments of life as the admiring delight in favourite poems, pictures, or melodies. And this difference will only come out more strongly, if it exists in spite of adverse conditions, and if Art in our day is really handicapped (as our author suggests) by having a less robust set of professors, and so presenting less of "healthy and manly vigour," than its rival, Science. But if the character claimed for Art is tolerably secure on its own ground of Beauty, we cannot but feel a little of the old unreality at the point where it is carried beyond that ground, and made to help out Science in the proof that Nature, with all its faults, can still be worshipped for being awful and One. We are told that, owing to the appearance of this feeling in Art towards the end of the last century, artists *for the first time* "began to feel that their pursuit was no desultory amusement, but an elevating worship". The clear sense of "something priestly and prophetic" in the poetic mission is dated from the age of Goethe and Wordsworth, and has "increased the self-respect of artists ever since". This is a puzzling argument. It cannot surely mean that this sense of a unity in Nature has a more exalting influence than other, and especially than supernatural, conceptions have had and can have, where they did or do exist. "Desultory amusement" would be an odd description of the art of the *Eumenides*, the *Œdipus Coloneus*, and the *Divina Commedia*. Our author has himself expressly shown how in Æschylus and Sophocles "religion and patriotism were undistinguishably blended"; he remarks on the Christian orthodoxy of Michael Angelo, and Dante, and Milton, and how Æschylus and Dante "were greater than the Sceptics"; he draws attention to the fact that, when the fervour of Pagan religion, as such, became impossible in Greece, "the great imaginative poets come no more". One cannot but reflect that on his own theory there was a glorious opportunity for them to reappear in the succeeding century, when the scientific and unifying study of Nature was receiv-

ing from Aristotle the most momentous impulse it has ever known; but let that pass. As applied to our own century, the argument, if it is to do the work required of it without ignoring the inspiration and dignity that poetry may draw from supernatural conceptions, is bound to mean that poets who have definitely turned their backs on those conceptions and so have foregone that special inspiration and dignity, have been rediscovering their inspiration and dignity in the conception of Nature as a vast and single Power. Nothing less than this will serve: for to suppose that, in a poetical mind where those further conceptions exist, they can be kept separate from the view of what Nature would be without them, is futile; and the page in which our author is reduced, by the exigencies of his argument, to eliminate from Wordsworth's view of the Universe the Christian faith which in the same breath is described as having "preserved him from pessimism," is perhaps the only approach to a juggle in his book. But when we look at the poets of exclusively "natural" Nature, does his account at all hold? Is it any awful Unity that they reveal to us? Is it not, on the other hand, in the Pagan qualities of Nature, in her beautiful and sensuous aspects, that Mr. Swinburne and his fellows have sought and found their inspiration? Beyond Goethe, the most companionless of great men, can our author point to a single instance in support of his contention? while even in Goethe, the indifference to the moral principle, to which he himself draws attention, is fatal to the sense of Unity as he describes it.

Further difficulties suggest themselves in respect of the place that Art would hold in our author's ideal community; where "every one would have some object of habitual contemplation, which would make life rich and bright to him, and of which he would think and speak with ardour". As regards pictorial and plastic Art, its relation to the religion of the future seems equally full of doubt, whether the religion be "natural" or "supernatural". For if, on the one hand, it is hard to imagine an appropriate mythology, and therefore a mode of concrete embodiment, for the spiritual elements of such defecated "supernaturalism" as may reject the dogmas and miracles of current religions, we have on the other hand no assurance that the arts of visible representation can enjoy the widest and deepest sort of popular life apart from such elements. And as regards the place of the other art of representation, Poetry, in a community where Morality is as natural and little noticed an element as the air men breathe, there is a deeper and more disturbing question. It may dis-

pense with supernaturalism: can it dispense with evil? How far, judging from experience, may not its scope and sublimity be held to depend on the existence in the world of a large proportion of sin and suffering? Life is to be indefinitely brightened; but can a great and various human literature dispense with shadows as completely as Fra Angelico's pictures of angels? Will *Othellos* be written when Iagos are impossible? Will Satan be an epic hero when he is impotent? Does it not look as if the levelling up of life to conditions where mental and spiritual conflicts will have largely ceased in attainment and contentment, must level down a large proportion of the great poetic heights? So far from the mark of this ideal community being, as our author prophesies, that genius will be "of ordinary occurrence" there, may not imaginative genius lose its pabulum in the absence of contrasts, just as humour would in the absence of incongruities? And may not days of full contentment prove unfavourable to moments of rapture?

To pursue these questions would be here out of place; and I gladly turn to the third department of life—that in which our author shows himself in his full strength—the department of Morality, or Religion on its social and political side. It is here that his strong imaginative grasp of history, and of large aspects of human nature, gets its fair chance; and the defects in his argument, which may invalidate his conclusions as to present and future possibilities, will still leave his work almost unassailable on purely historical ground. What, for instance, can be truer than his glance at the opposite errors of Fatalism and Titanism, at the fate of the men who underrate and of the men who overrate the effective force of their own wills? How striking is his range of illustration: *e.g.*, where the quality of determination to accept the truth of the Universe, however disagreeable, is exemplified in the attitude respectively assumed towards the lying court-prophets, towards Pharisaism, and towards the secularised Middle-Age Church, by the Hebrew prophets, primitive Christianity, and the Reformers! What reality he gives to the conception of Hebrew prophecy, not only in its continuous grasp of social and political phases, but in its limitations: *e.g.*, its failure to recognise that even a prophet may be something else besides true or false, namely, mistaken; and its denunciation of the worship of natural forms, addressed to a particular nation under particular conditions, and therefore irrelevant to the truly religious element in Greek nature-worship! Even if we demur to the summing up of Jewish history as "the dealings of a certain human group with Necessity," how

impressive remains his picture of the Bible as a whole, as one book, treating of the chequered fates of a nationality which merges at last into a world-religion; as an "Epic of Human Action" with a practical and temporal aim, exhibiting through a history of centuries the fundamental antithesis of inspiration and rules, of living and dead Morality, and leaving it "in the act of revolutionising the world"; but also as a fragment, peculiarly likely to be misunderstood and abused by literal and limited interpretations; so that the attempt of the Puritans "to rise once more to the same general view of human affairs" fails, "because they have no clue to the centuries immediately behind them"! What width and clearness in his views of the formation of theologies and religions: shown, *e.g.*, in his passing description of the older theologies as busying themselves quite as much with laws as with causes, and drawing no sharp line between natural and supernatural events, and of the gradual change of method through which Science assumed the domain of law, and Theology of supposed suspensions of law; and again in his account of the distinction between scientific and imaginative knowledge, and of the unfortunate consequences to Religion of the earlier predominance of the latter; and, above all, in his disentanglement of the two conceptions mixed up in every moral religion—laws, including penalties, and the worship of Man—specially illustrated in the rise of Catholicism, the "marriage between Rome and Jerusalem," and in the "Christian legalism" which was bound to supervene, where "the free morality" had become the religion of races only just ripe for the legal stage! What novelty he can give even to trite themes: *e.g.*, in his notice of the inherent pugnacity and mutually destructive effects of partial religions; and in his admission that Religion, like originality, is apt to be troublesome, and has been at times more mischievous than the cynicism of Secularity, while yet "the life of the soul" is vindicated in the ardour that characterises all religions, not merely true religions! And with what rapid and pregnant touches he brings out order among the crossing and confusing currents of the great stream: *e.g.*, in his brilliantly drawn-out comparison of the higher Paganism, of primitive Christianity, and of Science, to the three stages of childhood, youth, and manhood, and specially his vindication, as against Schiller, of the faults of Christianity as those of youth, not of old age; in his contrast of Paganism as it appeared in its decrepitude in the older civilisations, and in its new birth as a corrective of the Christian and monastic reaction; in his brief sketch of Religion as the great state-

builder, from Moses, through Mohammed, Gregory, the Teutonic reformers, the pilgrim fathers, on to the prophet of Utah; and especially of the primarily national and revolutionary character of Christianity, of its compromise with Rome and the grandeur of Latin Christianity—that Holy Roman Empire which "is to Rome what the Christian Church is to Judaism, the resurrection of a fallen nationality in an idealised shape"—and then of the gradual break-up of the consolidated world-church, and the spasmodic efforts of national states, as in Scotland and even in the France of the Revolution, to preserve the idea of a public religion! How trenchant, again, are the criticisms in which his views of the past are brought to bear on the present: *e.g.*, his exposure of the vague and idle notion that there might be a sort of return to classical Paganism, as though it had been the invasion of a Semitic religion, and not the inevitable course of development, which put the old fascinations to flight; his demonstration of the fortuitous nature of any apparent alliance between the misnamed "atheistic" tendencies of modern Science and the modern spirit of Revolution; his conception of the aspect that our national faults may present, when magnified in the total working of one nation on another, of England on India; his exposure of the want of free adaptation of means to ends in ecclesiastical politics, seen in the fantastic revivals called reformations, made by "those who cannot see the end," and so "fix their eyes, as the next best thing, on the beginning"; his scorn of the hollow apology for private sects of supernatural religionists in a secular state, that they are a return to the conditions of primitive Christianity,—to the conditions of the Church which "defied and vanquished philosophy," while "its modern imitation is retiring before it," and the "private judgment which the apologists appeal to is on all hands rejecting supernaturalism"! How impressive, too, if we can look at the words simply as they would strike us in a book of history, is his description of nationality as a sort of atmosphere round individual members of a nation, which, when any shock makes the individual conscious of it, becomes religion—a thesis characteristically illustrated by the transformation of the Jewish nationality into Judaism by the waters of Babylon, and by the behaviour of the American in Europe, preaching America in season and out of season; and how skilfully he uses the history of great institutions, springing up for the most part in an unreasoning and half-conscious way, and flourishing, without fear of damage from antiquarian researches, so long as they have a visible and palpable use,

to support his conception of a Church, not as a society where membership depends on opinions, but as a social organism into which a man is born, able to be disowned by him only when it refuses to make itself coextensive with culture and civilisation! How convincing, lastly, are the passages where he touches on the absence of any firm conception of the origin, *raison d'être*, and future of the State, and of any such general view of human affairs as Hebrew prophecy in an archaic manner supplied; and where he urges that history can only cease to be a chartless sea, on which men take short aimless voyages or from which they shrink back appalled, by vindicating the interpretation of human society as not only its proper business, but as a prime part of religious teaching!

But this instinct for viewing things historically, which lights up so many portions of the argument, seems in some degree answerable for what I cannot but think a grave weakness in the argument taken as a whole. For after all, the great problem which our author is facing is the problem of the present and the future; he himself emphasises this again and again. Our need, and his, is for a religion which the most civilised men of this generation may recognise as the common essence of views and sentiments hitherto regarded as disparate or antagonistic; in order that, having recognised it, they may promulgate it among their less enlightened fellows. Either there is, or there is not, such a religion, latent or rather dispersed in the actual views and sentiments of existing men. If, as our author holds, there is such a religion, which only needs to be set free and consolidated, it must have certain qualities in relation to the advanced class of minds which are to recognise and propagate it; and the meaning of its principal terms, such as "God" and "worship" and "religion" itself, must be a meaning which these advanced minds, here and now, do or can naturally attach to them. Now that these same terms have borne other and lower meanings in relation to less advanced minds may be most interesting from the point of view of history and development; but unless we are careful to distinguish our historical inquiry into what has been from our examination of what is or can be—to distinguish our survey of past religions from our search after that particular thing which we can hold, here and now, to deserve to be known and preached as Religion—those other meanings which the term has included will be apt to confuse the idea of this new thing which we are to denote by it; even as in Ethics we are familiar with the confusion that results

from mixing up questions about the original elements and historical formation of Conscience with questions about its nature and authority as a present fact. Now in his account of Religion, our author seems unconsciously to take advantage of ambiguities incident to this double way of regarding the subject. Thus he points out that benevolence has not always been thought one of the necessary attributes of God; therefore, he argues, benevolence cannot be regarded as part of the necessary connotation of the name God. Perfectly true; historically, of course, it cannot be so regarded. But this slips on into the conclusion that we, here and now, can worship as God a scientific order of things towards which, according to the author's own admission, our natural feelings may be at their best "fear and cold awe," and at their worst dread and despair—a conclusion which no amount of history can justify, simply because the point is one on which we interrogate, not history, but the minds and hearts of ourselves and our contemporaries.

"But," it may be said, "though benevolence is not an attribute of impersonal Nature, it is an attribute of Man in his moral aspect; and Morality is one of the essential factors of the new 'Natural Religion'." This, however, only brings out the inherent flaw in our author's composite definition of Religion; and the point demands particular attention. It is on regarding the elements of Religion *as a whole*, that he specially insists: this is the distinctive point in his view. "Man," he says, "has still grand spiritual interests, which are all-important to him, and which he partly feels to be so; only to his misfortune he has ceased to think of them together in the whole which they constitute." It is to the breaking up and distribution of its elements "under other names or under no name," that he attributes the attenuation of the meaning of Religion. But things which are confessedly distinct can only be bound into a whole by some principle of union, external or internal. The orthodox view of God or Providence is a real bond, though an external one. He is regarded as a common originator, the source of goodness and beauty as well as the ordainer of laws; and in his case the disruptive shock, produced by the fact that in their operation the laws often show themselves the reverse of good and beautiful, can always be parried for many minds by the doctrines of probation and future compensation. Usually the fact that we, in our relative and conditioned lives and enforced balance of pleasures and pains, often declare that pleasure in the present "more than counterbalances" pain in the past, is taken advantage of, projected into the future,

stripped of its relative character, and made a justification for the absolute sum-total of evil in the Universe. Even those whose logic refuses thus to embrace creative goodness and created evil under a single scheme, may still find in the mere notion of Omnipotence a bond for the discordant elements; for there is nothing incompatible between power and caprice; and it is a coherent view that things which move us to delight and admiration, and things which to all eternity would seem to us ineffaceable blots on creation, have both emanated from a source more or less indifferent to our susceptibilities. But such a bond is denied to the elements of our author's religion; for the simple reason that one of these, Beauty, is directly founded in man's feelings and in his inalienable susceptibilities to pleasure and pain, and another, Moral Goodness, is indirectly so founded, and that these are presented as *co-ordinate* with the third element, the dominance of immutable Law. Here then the discrepancies between what we *approve* and what we *find* in the world cannot be subsumed under any community of origin, or swallowed up in any uniting hypothesis. We cannot appeal to Omnipotence: for however much we acknowledge the overmastering force of natural law, and our own practical submission to it, we have admitted into our Religion, as co-ordinate with the recognition of that objective law, the recognition of something else which is not practical and objective, but experiential and subjective, namely, our own feelings of approbation and repugnance, before which Omnipotence is powerless, or rather is meaningless; a power that should make us approve of uncompensated pain, of that the essence of which is to be objected to, being not so much an impossibility as a contradiction in terms, and none the less so for being called Omnipotence. As long then as we reckon feelings, as well as objective facts, among the elements of which our Religion is to consist, we find for these elements no inner bond, capable of replacing the external bond of supra-human ordinance; and the discordance can escape notice only so long as we take a resolutely one-sided view of Nature. The Eternal and Immutable cannot be cut in two; and as soon as natural law, in the shape of a complete set of facts,[1] is set side by

[1] I may be told that it is not facts, but their abstract unity, that we are to worship: but this position is one to which our author does not keep at all consistently, and which moreover is only plausible so long as it is vague. The inspiring unity must obviously be a unity of *law;* for no one could feel inspired by the bare idea that a number of different things are included in a single sum-total of things. But then, as we have seen, no such single unity of law presents itself. And the more we concentrate our-

side with the joyful feelings that some of the facts inspire, and we are told to worship the combination, the opposite sort of facts insists on putting in its claim for recognition, and the combination falls to pieces. We may pour our oil and vinegar into one vessel, but we shall not, by so doing, conceal their antagonistic nature, or come to regard them with a homogeneous feeling. If they are to combine, it can only be in the menstruum of a supernatural theology.

And in the present instance the pouring them into one vessel, be it observed, is a purely voluntary act on our part; they are not so given us. A consideration on which our author more than once dwells suggests the exact difference. He rightly insists that among the contents of Nature we must include Humanity itself, and the slow but sure development of altruistic sentiment and social order: these, then, may be rightly ranked under a common name with things as different from them in the sentiments they inspire as plague and earthquake, so long as the name employed has no reference to the inspired sentiments. Such a common name is Nature: it is a uniting conception, external to our sentiments, between things which have, whether we love or hate them, the common quality of occurring or appearing in obedience to immutable laws quite independent of our individual will. This unity is one in the making of which we had no concern, and in which, therefore, things towards which we entertain the most opposite feelings may be forced upon us side by side. Religion, on the other hand, only has value for us as a principle of unity produced in our own hearts, and embracing things towards which, whether we regard them as attributes and actions of a single supreme Person or as distinct phenomena, we experience a common feeling of ardour and devotion. It was thus a true instinct which led Goethe, to whom our author points as the great seer of the unity of things, to preserve his conception from disintegrating influence by steadily turning his back on ideas of suffering and sacrifice. The worship of a unity of facts, apart from a unity of feeling, has as truly the note of superstition as to worship some single fact or object, *e.g.*, a reptile, that one

selves on the separate or subordinate laws, the more difficult is it to work up any large emotion towards them in abstraction from their effects on human senses or on human fates. Nor does this apply less, but rather more, if we attempt to regard them under an aspect of unity which our author often substitutes for that of regularity, that, namely, of an external Power or Necessity; for since we interpret the notion of Necessity from within outwards, it seems to contain the relation to ourselves at its very core; so that any emotion connected with it is peculiarly unable to leave that relation out of account.

dreads or dislikes; and to call it religious would be to fail in distinguishing Religion, as something to be acknowledged here and now, from the historic religions in which such superstitions have freely mingled.

If I seem to be pedantically pressing what after all is only a verbal point, I might at least reply that the importance I have attached to the matter of definition in no way exceeds that attached to it by our author himself. In his preface he attributes much of the disastrous contention which he deplores to the want of a true definition of Religion; and it is by means of just definitions that he hopes to show the fundamental agreement between those who believe that they are hopelessly opposed. But if words are of importance even here, where our author believes that this fundamental agreement already exists, still more must they be so where it as yet does not exist; and the words used have a weighty bearing on the actual propagation in an ignorant or hostile world of the truths on which he insists. We may admit those truths to the full, and still inquire what sort of difference in the practical acceptance of them will result from their being preached as a religion. Especially, how would such a mode of presenting them be likely to affect the revolutionary part of society, to whose enlightenment our author naturally attaches the greatest importance? Viewed in this light, it seems to me that no more dangerous word than "Religion" could be selected, under which to rank things as different as, on the one hand, the glow of healthy pleasure from an unselfish action or from a work of art, and, on the other, the fact (in our author's own words) that "if we could measure all the misery there is in the world, we should be appalled beyond description". The realisation of this latter appalling fact, which is as much an exemplification of natural law as that the sun will rise to-morrow, may be quite as important in the interests of mankind as access to the former sources of pleasure; but the attempt to bring them all under one grand conception, and to carry them all down in a lump by the impressive connotation of the word Religion, seems not only unreasonable but prejudicial. In the attempt to be grand and impressive, our appeal will lose the strength which would belong to it on the humbler ground of literal truth. It is as though one should try to get a child to swallow medicine by giving it at meal-times and representing it as food; which would merely produce in him a distrust of food in general, without making the medicine any the more palatable. And as regards this question of preaching the godhead of Nature to the poor and needy, we must remember that in proportion

as the conditions of a man's life are hard and narrow, is it impossible that he should take our author's all-round and impartial view of Nature. The view from the Brocken at which Goethe gazed, the gorse in bloom before which Linnæus knelt, are not for all; they would not be for all even could they be physically presented at will. Absorption in the imposing and cosmical aspects of the Universe presupposes some considerable degree of leisure and comfort: the mind, like the body, needs room to expand. We shall not reconcile men to the rigour and narrowness of their lot by pointing to the stars; but by appealing to their sympathy with their kind, and by opening up for them an imaginative interest in the future of this planet, through indications that the conditions of life on it are slowly improving. The religious imaginations of a favoured few, soaring above mundane things, may be able to find rest and support in the Cosmos; but if for the large majority of human toilers and sufferers the shelter of this half-way house is bound to fail, the religion that cannot reach Heaven will find its account, like Antæus, in keeping to the earth. And within this narrower circle the distinction, for religious purposes, of the personal centre from that which encompasses it, becomes still sharper; for the terrestrial environment contains plenty of what is far more alien to the idea or possibility of worship than the unoffending stars. It is only by distance that the hostile and depressing side of Nature's character vanishes: poets may praise the moon for her beauty without thought of her bleakness and sterility, and the many will merely remain indifferent; but if the earth and the life on it be so praised, the many will rebel.

The lesson must, of course, be learnt, as our author plainly sees. Of the texts which he suggests for the teachings of his "free clergy," one of the first is that the path of happiness for the individual is and must continue a hard one, and that it is not blocked by simply artificial barriers, or able to be cleared by any sweeping change in the present social fabric. This is a most important thing to inculcate, and there is nothing to hinder anyone from setting to work at inculcating it: but it is a piece of hard and repulsive common-sense; it belongs to the laws of Nature, but not of Nature as in any way worshipful. Even a preacher who took his texts from our author's own pages might find them somewhat less than inspiring: it may be a consolatory, but is hardly a religious, suggestion that "we become insensible to whatever evil does not affect ourselves"; nor would the apology for life that "though the happiness in it is not great, the variety is," be

a hopeful theme to expound to a congregation of factory-hands. The thought that for very long to come many lots must perforce remain hard and narrow, and that perhaps for ever happiness in life will be to many but a transient bloom, forces to the front an aspect of natural law which it seems like mockery to dignify with any sacred name. There is no dignity in privation and suffering, regarded as mere pieces of unavoidable fact. The Christian, in taking up his cross daily, may find that he can thank God for the cross as well as for the strength to bear it: but he is enabled to do this solely by that confidence in the ultimate designs of Providence which the hypothesis before us excludes; his cross has dignity and sacredness as part of the design of a personal and moral Being. If a Stoic can ever be said to bless his cross, it must be simply provisionally, as a means, a school of discipline for learning endurance and so reducing the burden of future crosses—*i.e.*, for reducing something which the very fact of his seeking to learn so to reduce it shows that he regards essentially as an evil; and the moral beauty of Stoicism seems merely degraded and obscured, when the "natural" weight and hardness of the cross, and the pitiless laws of weight and hardness, just because they are eternal and irreversible, are put on a sort of equality of excellence with the human qualities that resist their pressure; and are even combined with the very virtues which prevent the spirit from bowing beneath them, into an object of enthusiastic contemplation before which the spirit is to bow.

But there is another and still more vital objection to this compound religion. Religion must be *for all*: it must be looked on by its members as within the reach of all. A Utilitarian may find it possible to hold that conscious existence is desirable on the whole, and that his principle is being carried out in it, if only the number of lives in which happiness preponderates exceeds those in which the balance is irretrievably reversed; but he will not go so far as to demand from one of these hapless and uncompensated individuals any attitude towards such conditions but one of sick rebellion. Such an attitude on their parts will only be regarded by him as part of that unfortunate lot which, while regretting it, he holds to be an item of conditions that are on the whole desirable; and it will thus introduce no fundamental discord into his view of the Universe. But then he does not, or will not if he is wise, call his view of the Universe a religion. The connotation of that word seems alien to the very possibility of such exclusiveness. It seems impossible for anyone who holds a body of beliefs and sentiments in the

manner for which our author contends—the only manner, that is, which justifies the treatment of them as a religion—consciously to admit that for others a similar holding of them is absolutely out of the question, and that consequently his "religion" is one in which these others are for ever precluded from sharing. I am only vindicating for "worship" the unique and lofty sense which our author throughout ascribes to it, when I say that a God whom we cannot all worship is a God whom none of us can worship: in the very act of admitting that to some, through no fault of character or perversity of judgment, he is and must be the reverse of worshipful, his worshippers cease to worship him. So fundamental is this catholicity in the very notion of a lofty religion, that the notion dissolves in the presence of even a single case where the catholicity fails: touched by the mysterious implacable reality of a single life in whose owner's refusal to worship we can see no moral or intellectual flaw, the divinity to which our souls have clung becomes a cloud. It will be no valid answer to this to say that the individual's power of worship overflows the limits of his individual lot—to point to instances showing that, even in the absence of supernatural hope, incurable personal ill does not necessarily produce a spirit of rebellion or a yearning for general annihilation. I do not deny that the enlightened Stoic no less than the blind devotee may thus occasionally cast himself under the car of Juggernaut, and that the self-devoting impulse of the human spirit may make a car of Juggernaut even out of such an abstraction as destiny. Even so, it would be hard to prove that in his conviction of the inexorability of that destiny there lurked no shadow of doubt as to whether his eyes were truly in sight of the ultimate issues of things; and such a doubt means hope. But let that pass: grant that we approve and admire such a spirit: what is it that we admire? It is surely the love for humanity, the sympathy with others' welfare, which the sufferer is able to oppose to his own fate; and the religious and worshipful character of such love and sympathy I have not for a moment called in question: what I question is the religious and worshipful character of the fate itself. The inhuman fate and the human feelings, the very things which our imaginary humanitarian wins our admiration by opposing one to the other, and which I regard as essentially opposed, are the very things which our author unites, under the theoretical title of divinity and by the practical claim for worship. If he ever gets a Stoic to profess agreement with him, the spectacle may be sublime, but it will be neither logical nor religious; for keeping steadily in

view the point under discussion—which is the attitude of the innocent sufferer towards nothing more nor less than the laws by which he suffers—we might fairly say that, so far as his attitude was not one of aversion and even hatred, it partook rather of the nature of fanaticism than of religion. If we call the spirit of wanton self-immolation "religious" in the Hindoo, it is with distinct reference to his want of enlightenment, and solely by that relative and historical use of the word to which I have already adverted—a use quite out of place in the gospel of the enlightened future.

The result of our author's welding of non-personal law with personal virtue in his "natural" object of worship seems, in fact, simply to mar the true and beautiful aspect of that other great gospel of the future which is in its way a "natural religion"—the "Religion of Humanity". Positivism, though it does not profess to grapple with the mystery of evil, at least does not bend the knee before the system of natural law of which evil is a prominent feature: indeed its most popular English exponent has treated even the more majestic aspects of "cosmic emotion" with very scant ceremony. The consequence is that the religion of Humanity is, up to a certain point, one in which all may share; it has that essential note of a religion. Many may find it inadequate; but no one will be excluded from it by discovering, in the deepest depths of his personal experience, the incompatibility of the elements he is asked to unite. Whether the unique religious sentiment, on which the Positivist no less than our author insists, can permanently exist towards a Being whose gifts to us, as individuals, have come from no personal love and comprehension, and who, for all our service, is powerless to help us in the direst straits of life, is a separate question. But even those to whom the apparently uncompensated evil in the world is too huge a fact for a "religion" to pass by with regretful acquiescence, who find the mingled peace and ardour which belong to true "worship" impossible on such terms, and who cannot recognise the living head of a spiritual kingdom in an image wrought of even the finest human material, merely because it is bigger and grander than themselves, may still feel that the dream of such a deity is an imposing one; and that the element which our author would contribute to it is one rather of weakness and disunion than of dignity and strength, not so much the head of gold as the feet of clay.

The language I have used may seem to some unduly pessimistic: at any rate, it may be said, if some things cannot be remedied, the less they are thought about the better.

It would be easy to reply that the very prominence which one is impelled to give to these things may fairly be reckoned among the practical ill results to which a deification of impersonal law leads. The one is the natural answer to the other: for if ever there is an excuse for calling attention to Nature's darker side, it is surely when one is asked to worship her. But in the present controversy no such excuse is needed: the book before us contains passages which make it impossible to doubt its author's own intense realisation of that darker side. In addition to remarks already noticed, I may refer especially to the place where he recognises how easily the existence either of individuals or of whole communities may sink below suicide-mark; and to the concluding pages in which he himself describes the pessimistic position. This man sufficiently shows that, whoever else may, he at any rate does not sit light to the significance of irremediable evil, nor escape the chill blight under which "others," and so the panacea of feelings and work for others, become infected in our eyes with the paltriness and transience of our own personality; while at the same time the spirit of courageous wisdom which breathes through every page of his book, shows how little ground honest clearness of vision on such matters need afford to the usual charges against pessimism. But that he recognises the rock of offence only makes it stranger that he should imagine himself to have got round it. All this grief and pity at things as they are, and desire to have them otherwise, which are such real elements in his own mind, have been kept in abeyance in the passages where he insists on confronting now an "atheistic" conventionalism, and now a paralysing pessimism, with the vigour and enthusiasm of worship—taking no account of this *tertium quid*, this grief and pity, which is neither of the opposed terms, which is entirely remote from the enthusiasm of worship, and yet so little paralysing or conventional that it may be the very life-blood of the enthusiasm of duty.

An impression is in fact created by particular expressions, as well as by the general treatment, in the latter part of the book, that the writer's eminent sanity has interfered with his keeping steadily in view the depth and height of the meaning attached by him, in the first part, to the chief terms of religious phraseology. Nothing, for instance, could be more reasonable than to include, as a main subject of popular teaching, the demonstration that "the institutions left us from the past are no more diabolical than they are divine, being the fruit of necessary development far more than of free-will or calculation".

Yet, so far as they are matters of necessary development, these so-little divine institutions are parts of an order so divine that in the earlier chapters we have been bidden to call it God. Again, when insisting on the recognition of that law of Nature which is independent of us, on the acknowledgment that "the universe is greater than ourselves, and that our wills are weak compared with the law that governs it," he says that the lesson "ought not to be mastered as a mere depressing negation, but rather as a new religion"—with perfect justice, if "religion" could mean merely the set of conceptions and emotions by which our lives may be most wisely adjusted, but surely not with justice if it is to retain in its connotation the habit of enthusiastic contemplation. "Great" is a conveniently vague word; but worship is too peculiar and personal a feeling to admit among its objects two standards of greatness; and to worship two masters is harder even than to serve them. If we make the attempt, we find at once that either Nature or Morality must be sacrificed; for by the standard of the latter an impersonal and unmoral Universe is *not* "greater than" but less than ourselves. And again—strangest instance of all—in the very act of recognising the sense of an unmoral Power outside us as one which does and well may strike man with terror and "eternally trouble his repose," the author thinks it enough to add that the word "religion," *in its ordinary usage*, is not taken to include this aspect, and that such feelings belong rather to "superstition"; that is to say, this exponent of the "egregious mistake in nomenclature" by which "religion" has been wholly diverted from its proper meaning, this champion of Religion as inclusive of our *whole* feeling towards Nature, is found overleaping the radical objection to his own definition on the crutch of that limited and perverted usage which it is the aim of his whole treatise to supplant.

The so-called unity, which will survive the recognition of the "natural" God as the power of corruption, reaction, and barbarism, no less than of beauty and progress, may seem the stranger for the doubt whether, even on our author's own ground, it was necessary. What drives him to conceive the divine power, whether external or immanent, as nothing less than co-extensive with Nature? Is there no distinction between deadness and life? Is it only in metaphor that Evolution could be described as not merely a gradual process but a gradual victory? Is the idea of a divided Nature, and of a divine Being working itself clear from stubborn elements of grossness and imperfection by a process in which it is for us to share, too absurd even to be mentioned?

Perhaps, however, this spiritual development could have no interest or meaning for those whose spirits are to have no continuing share in it, so that any such transfigured Manicheism is excluded from a purely mundane religion. The same honest determination to keep to the most rigidly mundane conceptions, to find common religious ground for as many persons as possible by "taking the scientific view frankly at its worst," must further, I suppose, be taken to explain the exclusion from the argument of all metaphysical along with all supernatural views. "At its worst" may perhaps be intended to mean "at its least philosophical" as well as "at its least obviously religious"; whence the conspicuous absence of any hint that the "what" or "how" of Nature has ever been a philosophical question, or that any view of the external world other than the crudest realism of "common-sense" has ever been put forward. Or is it possible that a suspicion, inevitably suggested by the description of the scientific position in the opening chapter of the book, is really well-founded; and that the "philosophy" which would transcend the dualism of mind and matter is to our author, no less than to the scientist, as much an object of scorn as the pseudo-learning which he brackets with it, the "erudition" and "commentatorship" which create dogmas out of the untested *dicta* of the past? In either case, one cannot but remark that resolutely to ignore the philosophical stand-point is scarcely the most hopeful or legitimate way of lessening the gap between the thinkers and the masses, which he regards as so ominous a sign of our times.

And now, to pass to a final topic—one which the concluding pages of the book make it impossible to avoid—how do the peculiarities of the author's view of Natural Religion affect its relation, which he so prominently suggests, to Supernaturalism? (I adopt this last unfortunate and meaningless term, as I suppose he does, because common usage supplies no other single word for the suggestion of supramundane existence and hope.) First, then, must not the disintegrating effects of that jarring unmoral element which has so long distressed us, be traced on from the Natural into the Supernatural Religion? No scientific mind can imagine the transition from the "natural" to the "supernatural" as a leap: it is only the self-stultifying word "Supernatural" itself, which prevents the proverb "Natura non habet saltum" from being as applicable here as anywhere else. And it would surely be meaningless to deny to the object of our "natural" worship—to that which we are to regard here with all the sentiments of devotion and faith that we can

muster—a true kinship and continuation with that further something which is introduced expressly to give their fullest scope and satisfaction to those very sentiments. Hence a teacher like Dr. Martineau, who is quite in agreement with our author in regarding "Supernaturalism" not as the root but as the crown of moral life, can bring in his supernatural religion as a thoroughly invigorating and irradiating influence, because as a necessary means for the further continuance and development of the moral nature, and for the satisfaction of unsatisfied moral cravings. With such a teacher, Supernaturalism is immediately akin to the spiritual element in life which at once suggests and warrants it; and includes both the explanation and the necessary issue of that spiritual element. But how different is the case, when an unmoral and unspiritual element has been included in our "natural" object of worship. How can that element be reasonably got rid of? If "Existence" has any continuous relation to ourselves, could it be reasonable to regard as less than a *necessary* condition of existence that for which, as a condition of our present existence, our very widest powers of emotional realisation have been demanded? Here, then, no special alliance of the spiritual with the "supernatural" will be defensible. The government of the departments of the Universe which are beyond our knowledge may just as well be unmoral as that system of "natural law" which we know: there will be no reason why a future life should imply moral purification; why satisfaction should ever be given to our yearnings for a compensating issue to Nature's myriad injustices; or why the ὕλη of cramping conditions should not be as immortal as the spirit which struggles to transcend it. On such terms, the intuition of the "supernatural" had no business on our author's pages; it perishes before it is conceived; it is irrelevant to the very needs which are supposed to suggest it.

And lastly, suppose for a moment that he would consent to drop the discordant impersonal element in the "whole" which he presents for our worship. Natural Religion would then seem divisible into virtuous action, conquests over Nature in certain directions, and a healthy exercise of the various bodily and mental faculties, on the one hand; and on the other, manful endurance of the inevitable tedium, ugliness, and evil, of which a large part of Nature consists. It becomes then most important to realise what amount of difference will be made by the addition to these elements of even a faint intuition of a "supernatural" Providence, and of even a bare hope of a future life. It is a difference which

our author, judged by some of his concluding passages, cannot be accused of explicitly minimising; since he recognises as legitimate the doubt whether "the known and natural can suffice for human life"—a doubt for which, as thus generally expressed, might be advantageously substituted the precise and scientific statement that for some human lives it does and will, and for others it does not and will not, suffice; and he practically admits that for many logical minds (does it need much reading between the lines to add for his own?) the new element is the philosopher's stone which turns the dross of life to gold. But surely when we look back over the treatise from this final point, we cannot fail to see that by implication the difference in question has been minimised throughout, and that the pervading contradiction of the book has been here again exemplified? How many men will find that they can believe or even half-believe the one gospel, and throw the whole strength of their preaching into the other? This question implies no denial that "religion deals in the first instance with the known and the natural," and no assertion that mundane morality is dependent on the survival of Supernaturalism. We may go so far as to say that, were there men who could find it possible and honest to preach one gospel as a supplement to the other, those scientists who should treat them as reactionary opponents on a vital point, instead of as the more advanced and sanguine wing of their own progressive party, would be guilty of very short-sighted and unscientific conduct. But the question is just of this possibility; of the possibility of a common attitude of enthusiasm towards things so different as life with and life without the "supernatural" element, towards two "Eternals" one of which has for its essence the Love and Righteousness which are expressly excluded from the other—whether these things can ever to the same man seem so like each other, that he can pass from the one to the other without any paralysing fall of temperature, and regard and preach the mundane gospel with the worshipful fervour that our author demands of him. To pursue into detail the radical difference of attitude which Supernaturalism carries into every corner of life, and so into every corner of that with which in either case the preacher deals, would carry us too far: it must suffice to suggest that, as addressed to the majority of mankind, the keynote of the one gospel is resignation, and of the other, hope.

EDMUND GURNEY.

V.—ETHICS AND SOCIOLOGY.[1]

It was in 1839, with the publication of the third volume of the *Philosophie Positive*, that Comte promulgated his new conception of social science. Four years earlier Quetelet had made public in his book *On Man and the Development of his Faculties* the result of his statistical studies. But neither of these works had much immediate effect on the general intelligence of England or even of Europe. In 1843 J. S. Mill's *System of Logic* first saw the light. There the English public had its earliest introduction (if we except some review articles) to the views of the Positivist chief on the laws of intellectual progress and on the proper mode of studying moral phenomena. To the principles and ideas of method found in the *Philosophie Positive* Mill gave a generous, if somewhat sober, welcome: but he shrank, even at the first, from the imperial and sacerdotal tendencies of systematic sociology. For Quetelet a more enthusiastic apostle was prepared in H. T. Buckle. The first volume of his *History of Civilisation*, which came out in 1857, began by introducing to English readers the surprising uniformities which the Belgian statistician had shown to be exhibited in the actions of human beings.

From another quarter man's amenability to the methods of science was enforced with more originality. Darwin's *Origin of Species* in 1859 broke down the barriers which natural classification had opposed to the regress of scientific inquiry: and in 1862 Mr. Herbert Spencer's *First Principles* gave some coherent account of the way (already adopted in his *Principles of Psychology*, ed. 1855) in which Science henceforward must show what a thing is by tracing the process by which it has come to be. In 1871 Darwin's *Descent of Man* expressly showed how the general principles of evolution might serve to explain the characteristics of civilised man. These views, like those of Buckle, found in Germany even more enthusiastic welcome than in England. There the Darwinian example was followed up by applying evolutionist ideas to ethics and to language: and the German translation of Buckle's work by Ruge soon reached a fifth edition.

Vast issues would emerge if we were to ask how far this revolution in the attitude of science to man was due to contemporary or antecedent changes, either in metaphysics or

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in the methods of historical study. As usual, no doubt, no one department of activity can be singled out as the fountain-head. Experience, by unobserved attractions amongst intellectual and moral steps of progress, prepared men's minds in silence; and once a conspicuous instance had been signalled, the law so detected was rapidly extended over the whole range of the scientific problem. Successfully applied in a considerable branch of knowledge, the idea of evolution was no longer a hypothetical dream: and development, which had hitherto mainly figured in books on logic and metaphysics, seemed to gain corroboration when it found a graphic illustration in the phenomena of nature. Naturalists had been partially aware that the seemingly abrupt intervals between the characteristic types of animal and vegetable species were the sum of many gradual and unimportant variations appearing in the several individuals of a group. They had complained of the difficulty of separating species from species, and of giving a classification which did not confuse what nature had put asunder, and put asunder what nature had conjoined. They had seen the analogies of structure between different orders of animals, and had scarcely failed to note the parallel between the gradations which mark the growth of the adult form out of the embryo and the differences which divide the various adult forms in a species from each other. But if they observed these facts, the only lesson they drew was that the plan of organisation was essentially the same through all orders of animal life, and that distinction of species was a subjective device only, employed with but indifferent success to simplify the anomalies characterising the real objective world.

The motto of older science had been 'Isolate the phenomenon to be studied': *Divide et impera.* Each species was treated as a complete and independent object, and in the first instance examined for itself. The new way of looking at things reaffirmed an old philosophic dictum that the particulars could not profitably be studied except under reference to their enveloping system. It now became a scientific postulate that the structure of animal, plant, or anything, should if possible be regarded as a function of several agencies, and be explained by estimating the relations in which the object stood to other natural agents. Each natural object thus came to be held a point continually affected by and reacting upon its surroundings until an approximate equilibrium between them and it was reached. At every stage in the course of existence the individual, endowed with its special capacities, is subjected to pressure from the action

of other active capacities around it,—engaged in a struggle where in extreme cases it may conquer or die, but whence in general it will issue with a structure variously modified and accommodated. The plant and the animal, in particular, owe the specific differences which they possess to-day partly to inherited energies, partly to adjacent influences. The existing fauna and flora are the product of the interchanges of action which in infinitely varying degrees have gone on amongst the creatures of the past; and they in their turn are now undergoing influences which will in course of time result in a novel phase of terrestrial habitants. Following up the vistas thus suggested to the imagination, we seem, as we recede into the depths of the past ages, to approach forms of greater simplicity, more widely modifiable by circumstances, and only after slow processes of accommodation acquiring stability and permanence. It seems even possible by the aid of analogies to trace out the hypothetical steps by which such a rudimentary organism has in the lapse of countless ages embodied in itself a complex framework of organs, a system so stable in ordinary conditions that to us whose records only count by thousands of years it seems a necessary portion of the Cosmos.

Such a suggestion, though far from new in the history of knowledge, came like a revelation to the caterers for the reading public. It soon led to the inference that man too in his moral and spiritual, religious and artistic, powers of to-day is a product of circumstances, no less than the animal and the vegetable organisms. He too is due to the action of his conditions upon a vast vacuum of possibility for development: and here too we can go back along the line,—and here too it must have been a long line—by which out of a being with hardly any morality or spirituality at all he has grown into a complex intellectual product possessed of art, science, and religion. But—as we are emphatically reminded by Comte and others—there is one feature which demarcates man from the animal world. The animals and vegetables stand, each as an individual in its species, alone, separately exposed to the influences of their environment. But man is essentially a social being. Even where, as in case of the social bees and ants, some analogy is presented to a human community, the unions are really unlike. The hive and the ant-hill are as it were a magnified individual, marked by a unity even closer than a human family. The hive may in fact be compared to a dicœcious plant: the queen, working-bee and drone, are only three fractions out of which the 'great-bee' is made up. Here, and here alone, we find

realised the ideal community of Plato. To such an extent is this the case that some modern *savants* incline literally to accept Virgil's dictum about the hive *(mens omnibus una est)* and maintain that there is one collective consciousness for the whole group. No doubt there is a tendency in the specialised developments even of human societies to lead to a considerable amount of social stratification. It may not go so far as those characteristic differences of physique which voyagers in the Pacific note between the two halves of the social scale; it may not always mark off the victims of sedentary and mechanical pursuits in the way to which the Greek aristocrats referred with so much pride. But it is characteristic of all semi-barbarous societies to exhibit such physical divergencies: and it is rather the ideal of ethical progress than the actual law of any society to maintain amidst speciality of function a general unity and common ground of human development, both moral and physical.

This sociality, so characteristic of the human being, acts as a sort of elastic buffer between the individual and the outward world. In the case of man, therefore, the problem of evolution has to be approached in two stages. First of all there is a study of the elements and forces which contribute to organise society, and shape the forms of its religious, economical and political structure. It is desirable to ascertain, if possible, the laws which govern the sympathetic connexions between one part of the body social and another, and the order in which its states succeed each other. This is the problem, known in a limited and practical aspect to the Greeks as Political Philosophy, and to the moderns, with a wider scope as Sociology. The second stage of the problem —the problem of explaining the genesis of the moral and spiritual man—has been called Ethics. It regards man not as an individual in nature, but as a member of a social body, of a social organism which accumulates and transmits to him the influences of external circumstances. In this social organism so-called are stored up the means by which man both intellectually and materially lives. If we take the solitary savage hunter as the nearest approach to the purely animal type, we find a being who meets the natural forces directly and alone. Without companions, tools, or means of union, he is the plaything of elementary nature, and has no reserve forces, no accumulations, no capital, to meet unusual demands upon his resources. His life is a mere aggregation of several struggles for the means of life, in which no instant has any bearing upon or derives much benefit from the achievements of another. But even the hunter, and still

more, the more social types of humanity, cannot be treated as a mere resultant from the action of direct physical modifications. The social factor interferes from the very first. Social man earns his daily bread not by his direct action upon nature, but through the instrumentality of an economic system of capital and labour: he thinks and learns by means of a language which is under the guardianship of his nation, by means of a scientific pabulum which is stored up in books and protected by corporations: he loves his kind and worships his God by means of permanent institutions into which the social body has constituted itself.

Man was, in short, declared to be a social and what is perhaps even more, an historical animal. It was proclaimed that the mechanism of society had made him what he is. It seemed as if here we again had a picture before our minds of the rude and spiritually naked being who gradually as he lives puts on from his social environment some mental, æsthetic and moral characters, some forms of thought and principles of conduct, and who, having lived, hands down to his children if not these forms and principles themselves, at least an organism predisposed to develop them under much slighter stimuli than were needed for the parents. The animals inherit only such capabilities, only such capital, as can be organised in their bodily framework. But in man's case the achievements of one generation are laid up for the use of another: and the individual enters upon a great inheritance of potential wealth, the secret of employing which is entrusted to him by tradition from his forefathers. This is the true heredity in human culture: and not any imaginary localisation of categories and ideas in the lobes of the brain, such as the last and grotesquest phase of the hypothesis of innate ideas would ask us to believe. From this objective cornucopia of mental and moral wealth man fills his own individual cup: but, in so doing, he is but drawing from the bank money which he and his kind deposited there, and using it, if he uses it well, so as to increase the number of talents, if ill, so as to diminish the capital of humanity.

A similar conclusion had been brought home, and in a more strikingly real way, by the lessons which had been drawn from statistical researches, especially as prosecuted since the third decennium of the present century. A quivering horror passed over society as it read in the pages of Buckle that in a fairly large given population the yearly number of births, deaths, and marriages, of crimes, of suicides, and even of unaddressed letters which found their way

to the Post-office, remained without any noteworthy variation from one year to another. Even those familiar with the adage in the poet—*Sine Cerere et Libero friget Venus*—were far less deeply impressed with the law thus expounded than when it was stated in the shape of a tolerably constant ratio between the cost of a bushel of wheat and the yearly number of weddings. There is a tribute,—so the founder of moral statistics is never weary of repeating—which mankind pays with more regularity than what it owes to the treasury of the state: the tribute which it pays to crime. Year after year the same crimes, the same punishments, it is asserted, reappear with alarming uniformity in each country, in each group of human beings living under similar conditions. It seemed as if there were a fixed tale of victims set apart every Christmas to be offered in the course of next year on the altars of Hymen or of Libitina. And whereas Süssmilch, who, a century ago, called attention in Germany to these uniformities in the birth, death and marriage rates, had used them to illustrate the doctrine that Providence did all things with mathematical accuracy, the new school rather left an impression that a horrid Moloch ruled the destinies of mankind. What the theologians had called God, the scientific metaphysicians styled cosmic forces and natural laws. A gruesome Setebos, who cared nothing for individuals but only for the kind, and who, as palæontology had illustrated, had but slight sympathy even with any kind, seemed to be the only god left to sport with this lower world.

The statistical theorists proposed to clear the way for a science of social man, by getting rid of the objection that the acts of individuals are not amenable to calculation. They offered proof that by observing these acts over a sufficiently large group—especially a group possessing political, national or social uniformity—we should find that the acts due to individuals are one year in quantity and quality merely a repetition of what they had been the year before. The greater the mass of individuals observed, the more individual peculiarities both physical and mental are obliterated in a general average or mean. Such an average man *(homme moyen)* is the proper subject of all social propositions. The acts which were specially selected for observation were the criminal statistics of a country, the lists of suicides, and the numbers of marriages. There are few available statistics for good actions: but by a remarkable application of metaphysical subtleties, Buckle argued that, the sum of human action being constant, a plus on the bad side must be com-

pensated by a minus on the good side. As for marriages there may be some doubts as to the place they should have in the classification: but here the ingenious theorists found a point which they did not let slip. "If there is one circumstance in life," said Quetelet, who is quoted with admiring acceptance by his followers, "where a man has most interest in acting circumspectly and using all the power of his free-will, it is unquestionably when he proposes to marry." But with the marriage-lists before us, it is clear that this free-will counts for nothing.

This reference to free-will does not seem particularly happy. However necessary circumspection may be in theory for those bent on matrimony, it is probably not very largely exercised: and even if it were, though it might lead to some difference in the persons chosen, it would barely affect the numbers of the unions. Landor at 36, though theoretically aware that "marriage unrols the awful lot of numberless generations," at once declares "I'll marry her" when he sets eye upon a young lady at a ball, and carries out his whim. And many people probably would echo the gentleman in Miss Austen's novel: "I was in the middle before I knew that I had begun". It seems even more pitiful to speak of the free-will of the criminal and the suicide. Without probing very deeply the mysteries of these dark chambers in human history, it may be said that, unless free-will merely means the absence of external compulsion, the criminal and the suicide, apart from the not infrequent cases where he is the victim of disease, passion and intoxication, rather drifts in semi-fatalism towards his miserable goal than actively purposes and predetermines it. If such statistics prove anything, it is rather that in the ordinary run of life "volition is extremely rare: nearly the whole of the practical life of man is and has ever been transacted by an unconscious force" (*The Alternative*, p. 385). Though even this may be going beyond the evidence.

It should be added that the amazing uniformity sometimes alleged to appear in the yearly budget of crimes was considerably overstated; that the limits of variation were wide, and that much depended upon the manipulation of the tables of data. It should still more be added that such deviations were to be expected, so long as the acts tabulated were known at least to depend on certain conditions, which varied in some cases apart from human interference, but in others were distinctly modifiable by it. There is no doubt, for example, that an abundant vintage means an increase of crime of one kind: that a failure in the harvest means

increase of another kind of crime. And as to the modifying power of legislation, there is as little doubt that the social condonation which, *e.g.*, attends suicide removes a powerful stimulus against the act, and renders any formal legislation perfectly nugatory.

But even with such drawbacks, enough remains to make it clear that individualism has not the whole bundle of keys to the secret of man. Man must not be studied in isolation from his surroundings. Living in a community, he voluntarily renounces a part of his individuality, to become a fraction of a great body which also has its life and its various phases. "It is," adds Quetelet, "the portion of his individuality which has been thus put in pledge that ultimately regulates the chief social phenomena. It determines the customs, requirements, and national spirit of a people. And the regularity remarked in the series of events must be attributed not to the wills of individuals, but to the habitudes of that concrete being we call a people and regard as endued with a will of its own and ways which it is reluctant to change." In normal circumstances the average man may be described as the child of his people. The explanation of his actions, his beliefs, his rules, is not to be sought in him, but in the collective being from which he derives them. Alike for good or for evil, the average man—and it is of him that science can most obviously treat—is only an exponent of the tendencies and wishes prevalent in the medium to which he belongs. The criminal, in this light, is seen to be the product of a diseased society: a society which has the same longings, the same estimates of worth, as the thief and the murderer, but has not the same temptations and the same constraints. The good man, too, owes half his goodness to the sympathetic opinion in which he lives, and which bears him up into heights of sacrifice and charity which his unassisted energies would never reach. Man is not an independent monad in the world: he and the society in which he is set are bound by chains of habit, by a tendency to persist in *statu quo*, a power of inertia which whenever the will is dormant carries on the movement which it has with mechanical repetition, and even struggles against the will which seeks to alter it. It is thus evident that ethics cannot stand independent of politics. Hence every soul which has found what it deems higher truth seeks by an instinct of self-preservation to form an association, to found a brotherhood,—feeling that unless it can stand strong in the sympathy of a band, it will soon fall back into accustomed paths. Hence the powerlessness of legislation which can only attack

an isolated offence: hence the omnipotence of an education which can create a tone of character and mode of feeling with which the beneficial agencies of law will find themselves in harmony.

It is scarcely to be wondered at if these considerations tended to shake the conventional methods of ethics out of the steady grooves in which they had run for more than a century. English moral philosophy had cut itself completely off from the two great ethical thinkers of the 17th century. Hobbes had the honour of having his main political and moral theses condemned not long after his death by the University of Oxford: and Cudworth had to sustain the more emphatic condemnation which the practical understanding of his country casts upon the metaphysician. Hobbes unfortunately wrote under the tension caused by an age in which the all-consuming fire of partisanship turned both writer and reader into polemics rather than students of truth: and Cudworth made the mistake of supposing that the most idealist of philosophies, and that an ancient system, could come home to the needs of modern England. Yet it is not too much to say that calm examination of Hobbes and Cudworth might have prevented much tedious iteration of moral commonplaces in the literature of the 18th century.

Ethical thought, however, took another direction, at least in England. It rejected the attempt made by Hobbes to base ethical obligations on the authority of a sovereign power in the commonwealth, as well as the attempt made by Cudworth to show them founded in an intelligent order of things anterior and superior to human affairs. The moralists from Locke and Butler down to the second quarter of the present century made it their main care to steer clear of metaphysics, and to keep up no more than a minimum contact with theology and jurisprudence. This was a natural recoil from the Scholastic amalgamation between the Christian graces and the heathen virtues: and no less a recoil from the hybrid progeny of ethics and jurisprudence, which under the name of Natural Law commended itself to the philosophers of the Continent. The English moralists took up a definite, if somewhat narrow, problem. They discussed the abstract question of the principles in the individual man which enable him to distinguish between right and wrong, and which lead him to pursue the former and avoid the latter. How is a man by himself to decide what is right? And why is he to do what is right?

The answers to these questions divide last-century moral-

ists into two groups: the Utilitarians and the Intuitionalists, as they are generally called. The Utilitarians sought to establish that the true test of right or wrong conduct is, whether it conduces or not to the happiness of human beings. The moral sentiments seem no doubt to have another rule: but it will be found that they soon learn to reserve their approbation for what is useful, and their disapproval for what is injurious to the community. In earlier stages of the theory it was supported by theological presuppositions. Apparent exceptions were got over by the reflection that although certain kinds of good conduct had no obvious usefulness in the present world, they were still advantageous in consideration of the bounteous rewards awaiting their authors in the world to come. But gradually as the theory was secularised, it was laid down as a general principle that the merit of what were commonly regarded as good and virtuous actions was based on the preponderance of advantage which the prescribed conduct would in the long-run secure for the best interests of the great majority of human beings. The problem of morality seemed at last simplified and brought to a workable test. Some doubts might be raised as to what were the best interests of human beings: but they were settled by an appeal to the general uniformity alleged to exist in the common estimate on these matters. The suggestion made by the theory was at any rate all in favour of progress and reform. Utilitarianism demands continuous adaptation of ordinances and beliefs to needs. No dignity, however sacred or august, however ready to take its stand on unquestioned and superhuman authority, can conceal its weakness when required to produce as credentials a proof that the world is ascertainably the better for it. But utilitarianism often brought hardships in the train of its exceeding haste to remove abuses. And that not merely through the common error which makes the advanced philanthropist think he knows what is good for others better than those others know themselves. Benevolent despotism, were it otherwise right, is but a secondary evil. There is another and deadlier source of mischief.

The experiential process through which beliefs and institutions have been established is often the slow ingathering of ages: and the transient individual is seldom in a position to estimate fairly the weight of the testimony in their favour. So much in social growth has been due to forces operating beyond the ken of consciousness or memory,—forces of which an analytic estimate would require, and probably in most cases exceed, the utmost resources of logic and computation.

The utilitarian, anxious to have nothing held sacred except what can bring objective witnesses on its behalf, is only too likely, as human nature goes, to forget that he has not a 'dry light' of impartiality, but is fired with a zeal which, however honest in abstract professions, is liable to the attraction of personal prejudices. He is guided by the maxim which if good in law is questionable in logic: *De non apparentibus et de non existentibus eadem est ratio.* What he could not detect by his means of observation, that he denied to exist. He elevated his single powers into a standard of non-existence. His principle may have been abstractly just, but it could only be applied under the guidance of historical analysis, and with due regard to the complex constituents of human nature. Instead of looking at the matters of morals and religion as so many things in juxtaposition, he had to learn that they were held together by real though indiscernible ties, and that one portion could not be harmlessly dissevered from another. The want of such a perception that a delicate sympathy beats through every fibre of human association made the older utilitarians harsh and sometimes vulgar in their methods.

To some minds probably it was even a graver charge that the utilitarian theory did away with the fixity which was at least in theory associated with the recognised moral distinctions. Right and wrong seemed to be made dependent on a mere difference of weight when consequences were laid in the scales of the balance: and even if the consequences were professedly general averages, it might be urged that they were probably subject to periodic variations, or even in some cases to revolutions. But such a complaint, though probably legitimate against occasional applications, is invalid against the principle of the method. It is an external and casual limitation of the utilitarian principle which stops it short at those partial or temporary utilities which we call expediency. The horizon of utility can be pushed out beyond the limitations of a particular time or place: it can transcend the bounds fixed by individual fancy and desire, and make itself conterminous with the furthest conceivable limits of the distant and the future. Yet when it thus looks at human actions, as it were *sub specie æternitatis*, and approximates to that 'idea of goodness' which Plato made the ultimate canon of conduct, it may be questioned whether it has not changed the basis of its character, and surreptitiously appropriated the note of idealism.

The other theory of last century which attempted to justify the belief in moral distinctions was that of a Moral Sense or

Conscience. Man, according to this view, possessed a special and original power of distinguishing right and wrong—a spark of the divine light, which, if he only kept his eyes open, would always show the right path. Against this infallible arbiter within the breast, no merely outward authority, no argumentation which failed to alter conviction, could count as worth anything. And yet the believer in such a sense must sometimes confess himself without any test to mark off the voice of God within him from the suggestions of mere impulse. The rights of conscience easily became a cloak for a motley mass of motives. Selfish interests can scarcely ever be proved absent: and often the so-called intuitions of conscience are merely the reflexion of judgments current in the social stratum to which the individual belongs. And so far as the theory asserted that the individual soul had a sure light discerning moral good from evil, it stated what practice showed to be untrue. Individual man is no more infallible in moral than in other judgments: his isolated verdicts can no more be accepted as decrees in one case than in the other.

The advocates of the theory really had their eye on two points, not always in very close or necessary connexion with each other. The one was that moral good and evil are not arbitrary or esoteric distinctions, but rest upon a common and permanent element of human nature, and that therefore this fundamental nature, common to all men, must be able to detect their existence. The doctrine of an innate conscience was an asseveration that right and wrong are due to no metaphysical subtleties or scientific reasonings, and are derived from no merely historical facts, but are the very characteristic work of humanity, the seal and symbol of man's place in the universe. The second point was that in judgments upon human conduct, no less than in the processes which lead up to action, there is abundant room and frequent need for a tact or delicacy of discrimination, of an intuitive understanding, which does not admit of formulation in rules, and cannot support itself on strict syllogisms. The theory, in short, was an awkward recognition of one feature common to æsthetic with moral judgments. Art and the conduct of life require more than the powers of abstraction and analysis which are commonly held sufficient for science. For the great bulk of mankind the validity of their moral as of their æsthetic principles must depend, not on their scientific acquaintance with the principles of art and morals, but on constant familiarity and contact with great and good examples, on the generation in them of a moral and æsthetic

taste which instinctively recoils from evil and aspires to live with the fair and good. Both require a power of looking at things as a whole and in the concrete; because *ars longa, vita brevis est*—because the analysis of science lingers and conduct presses for decision.

While what precedes is more especially true of the moral sense, Conscience has a peculiar feature of great historical moment. And that is its reference to a moral law, and to the idea of duty. Conscience is described as the vice-gerent of God—the witness in man to a law which governs the moral world. The sense of duty is the recognition that every act, instead of standing alone, is confronted, as soon as it emerges into being, with the laws of a great spiritual kingdom, of which man, as a reasonable being, is a citizen, and to whose general aims and regulations he is bound to conform. It is this feeling of a higher and better world, of a truer self, which conscience bears evidence to. Here man finds a safeguard against petty claims, temporary perturbations, human weaknesses: here in the conception of a universe, to which every act must be relative and subordinate, the human soul seeks a law to limit its extravagances and to consolidate its efforts after right. But such a view of conscience found little support amongst English moralists.

Yet the theory of Conscience kept alive the truth that no act can count as moral which does not spring from the heart: that mere arguments are powerless in morals whatever they may avail in science: that in morals the soul must feel itself in immediate contact with and direct vision of goodness. It failed to show, however, that this immediacy of presence does not come without preparation. And of most applications of the term conscience it may be said, that the appeal to its authority is a protest of the party in possession, the *beati possidentes* in a man, against the new candidates for reception into his mind. Very early in the growth of consciousness in most men, the character settles into a condition of stable equilibrium, or of adaptation to the immediate environment. The mind becomes moulded in a stereotyped form which resists any attempt at modification. The reaction of this fixed self against new influences is what we call conscience. Hence, from the instinctive repugnance to anything strange to its old tone, its manifestations are chiefly in the way of negation and objection. In this attitude lies both its strength and its weakness. It is too apt to take a stranger for an enemy. Its true function is rather to warn than to judge: it notes discordance and inconsistency, and excites wakefulness: and the harmony to be secured may

occasionally come not by rejecting the new, but by showing that the stranger is only a friend in disguise.

Both of these schools were essentially products of a Protestant and critical age. The theory of Conscience neglected the supplementary doctrine that the Church in its catholic unity is the depository of truth, and that the whole body of the faithful must afford a corrective to the idiosyncrasies of the single believer. The critical theory of Utility forgot that in a creative and organic age much takes place which has not legitimated itself by registering its birth on the records of memory. Hence a reaction came against the somewhat theological hypothesis of a fixed conscience, with its dependence upon an abstract and impersonal law of duty, as well as against the dry and mechanical conception of utility, which neglected, or seemed to neglect, as unaccountable and absurd much that the finest sensibilities of mankind held dear. Men were weary of the excessive individualism which left men isolated in the universe subject only to the awful voice of duty on one hand or to the calculations of utility on the other. Human life was after all something in and for itself, —not merely a series of actions subservient to various uses, and not merely a table of examples intended to illustrate eternal laws.

The change in the conception of human life was heralded by a new tone in the poets. The moralising and didactic tone gave place to a freer and more catholic spirit which sought sympathy outside the region of propriety and had other ideals than improvement and edification. The very moral came to be the sign of limitation: the moralist stood in contrast to the concrete human being: and moral philosophy itself was replaced by Ethics as the more comprehensive term. The signs of the coming emancipation from the narrowing divisions which the religious and political schisms of the 16th and 17th centuries had branded into the very life of men were seen already in the years immediately antecedent to the French Revolution. The dawn of a humanity which was neither Church nor Dissent, neither monarchical nor anti-monarchical, was apparent both in the mild and hesitant accents of Cowper and in the fierier and more fitful utterances of Burns. But the new spirit scarcely gained articulate expression of its own aspirations and aims till the time of Wordsworth and Shelley. And even in them the old antithesis revived: and neither heard the full notes of the music of humanity. The echoes of ancient conscience reverberate through that world of nature where Wordsworth taught man

to be at home: the sentences of the moral law are written on the ancient hills; the birds sing and the flowers bloom to gladden, to purify and to strengthen the heart of man. And Shelley, with all his bright and passionate absorption in the life of clouds and skylarks, is haunted by the perplexing memory of the old struggle between the tyranny of ancient custom and the nascent rights of human tendernesses. For the fullest utterance of the change which was coming over men's minds we must go to Goethe, who, as he watched and waited through the phases of contest and victory, of vagary and resolute endeavour, between the old world and the new, seemed for the time to concentrate in himself and to mould in plastic outlines the sympathetic tide which was swelling and swaying through western Europe.

It was with a light heart that the enthusiastic generation which had grown up in the fostering airs of the Revolution went down into the open plain where the freedom of nature replaced the law of duty, and where the demand for utility was hushed in the presence of full enjoyment. They seemed to gain release from the toilsome restrictions of humanity,—an entrance into "an ampler ether, a diviner air". The watchwords of the new school were Nature and Romance: at first the two seemed not inconsistent. The unity of existence was loudly affirmed against the old logical distinctions which had come to mean real separations. Man was to be studied not as unique, as isolated from the rest of creation, but as at best an elder brother in the grand family of animate nature. The line which had hitherto divided history from physics, ethics from physiology, was doomed to obliteration. The natural world was declared to have a history no less than the spiritual: laws, institutions, language and religion to have their growth as well as plants: to speak of the former as made by man to be as meaningless as to assert it of the latter. Here was reaction against the fancy that the forms encircling man's life are due to conscious ingenuity, and that by a bold stroke reversing the line of historical growth it was possible to carry men on vast lengths in the path of progress. It was felt that individual effort, even when in the hands of a lawgiver and wielding the force of an empire, was weak against nature and destiny. The gigantic forces directed by a Napoleon had shivered to pieces when they came directly into collision with the Olympian powers of Nationality.

Coming on the back of these impressions, the suggestion that man in his present condition represents the result of a struggle for existence, in which he has stood the brunt of the

battle better than his animal compeers, does not at first sight promise much help to a theory of ethics. The law which the process of life shows to be the prevailing lesson of nature is that weakness is the chief sin, and strength the chief virtue. The evolution of the forms of animate existence has been a silent but solemn discourse illustrating the various texts of the gospel of force; and any moral which can be inferred from the spectacle is the morality of egoism. Morality thus collapses in the single virtue of prudence, and self-regarding prudence. To help the weak, to relieve the suffering, to teach the ignorant, would be to run counter to the law of nature which leaves them to die. Intelligence, recognising the general tendency by which the less highly endowed abandon the field to their superiors, would conform man's action to this truth, and not attempt to alter the course of natural events.

Or, if the main emphasis were laid upon the apparently accidental character of the process by which the several interactions between cosmical circumstances and a germ of life lodged in some rudimentary organism slowly accumulated their effects to produce the man of to-day, a new intensity might be given to the fatalistic creed which treats man as the irresponsible product of the physical aggregate. Nature is then presented—not as a Goshen of romance and freedom, but as a prison where it is fruitless to knock against the bars:—as a compact structure where the inflexible chain of causation binds event to event. Consciousness, and with it the sense of freedom, is treated as a mere illusion, which plays upon the surface, but has no effect upon the movement of the machinery which drives on blindly until it has exhausted itself in final collapse. Man, like other things in the field of phenomena, cannot move except because something else has moved—or instead of saying that he acts, we should say that he has been acted upon. Or, in the words of a determinist of the pre-scientific period: "The man differs from the knife as the iron candlestick differs from the brass one: he has one more way of being acted upon. This additional way in man is motive: in the candlestick is magnetism." Mind in short was treated as a name for certain occasional phenomena—no doubt somewhat unaccountable—which accompanied the natural processes; and it was denied other influence than that of interpreter between the social arrangements which had been the outcome of evolution, and the individual who found himself, by no act of his, planted in their midst.

Metaphysically, again, the idea of Evolution gave a new

aspect to the old quarrel between mechanical causation and teleology. It left no place for the theory of a conscious designer, an intelligent mind planning beforehand the course of the universe: but it emphasised more than ever the relativity of every detail in the universe to every other and to the whole. It set aside for ever the belief that man had been the constant aim of the providence of a utilitarian deity: but it taught that a boundless variety of phenomena naturally came upon examination to present themselves as the differentiation and development of a governing principle. Everywhere there was evidence of a power of rectification and self-adjustment in the universe: a universal *vis medicatrix naturae*. Even so-called inanimate matter seemed as if it must be conceived invested with some powers analogous to life, to will, perhaps to thought. Thus a principle of life—or a more elementary and comprehensive principle than life—(*"Wer darf ihn nennen? Und wer bekennen?"*)—keeps up perpetual correlation and sympathetic concurrence between the successive and coexistent constituents of the cosmic process. Mere juxtaposition and sequence are replaced by more intimate unity in the bosom of a potent totality. The consensus of functions and interdependence of parts were so patent in all provinces of nature that metaphysicians seized upon the hint to modernise their theories: and in Hartmann's philosophy the waning speculation of Germany provided, under the title of the *Unconscious*, an ontological basis for the conceptions of the biologist. As consciousness had been driven from the field of adaptation, it was natural for those who looked upon mind as a late product of evolution, to introduce this picturesquely gloomy Power to give a sort of blind direction and unity to the process which made the wishes of individuals subserve the great interests of the kind.

Apart from these metaphysical inferences from the theory of Evolution, there were others more intimately related to ethics. Instead of fixed and absolute moral distinctions, it seemed to suggest a gradual process in the discovery of morality, a slow and intermittent emergence of moral conceptions, coming out into clearer outlines, and extending to applications at first undreamed of. Morality was evidently not the equipment of the primitive barbarian, but a growing and increasing ideal which was formed in humanity itself, and moulded itself upon the lines laid down by the requirements of society. Its fundamental fact was the sociality of man, and its development consisted in successive discoveries of the relationships which that fundamental fact in-

volved, and in laying bare the conditions of social well-being. At first these conditions were but roughly and sometimes even erroneously conceived. But as life grew more complex and of richer content, and as knowledge increased, the perception of these conditions revealed a greater number, and defined them with greater accuracy.

In these considerations it is tacitly implied that in ethics we have something specially human; a province as it were set apart from the general economy of nature. Within the charmed circle of a society, the struggle for existence was temporarily at least reduced to peace: though it still raged outside in the relations between different societies. On the day when man, from the needs of physical existence, was driven to combine with his fellows into a society, he turned his back upon nature, and laid the foundations of a new kingdom. The society at first had narrow limits, and was tainted by exclusiveness. But in its essential germ, it had the promise of great things. It had broken the ban of nature, which lays down self-seeking as its law. And this radical change in the attitude towards the problem of life is dependent upon the entrance of a new faculty upon the scene, the power of conscious intelligence. By its means there is formed the idea of a totality of which the individual is a member. He learns that he is not for himself, but for something which includes and dominates himself: an idea, at first somewhat confused with his own and other personal interests, but capable of being made more and more clear. The recognition of this dependence of the individual upon a permanent something in which he finds the central principle of his being is the characteristic note of morality. He has more ways than one of describing it. He may speak of it as the reason that is within him, the voice of conscience, the sense of duty, the subordination of the lower nature in man to the higher; his true self as opposed to the temporary instincts and changing phases which pass across his consciousness. Yet if it is himself, in another sense it is not himself: but something divine, and universal, a common humanity, an epiphany of the divine. Or, he may describe the bond of his allegiance as due to the social community, to the state, to the body politic. It is in the ordinances of the society that he finds the most tangible expression of conditions on which his life as a *human* being depends, the standard for repressing accidental and temporary aberrations. But these ordinances barely suffice to mark out the framework of such regulative: they vary from time to time and from community to community: they are not

wholly free from temptation to selfishness and truckling to one-sided impulses any more than the court of appeal in the individual. And hence in order to secure a safe and stable rule, beyond the disturbing influences of individual and particular selfishness, the standard is placed in the ideal self which is the far-off goal to which the whole creation moves, that self-subsisting unity which is conceived as the source of all our moral being and as the infinitely perfect life towards which the gradual enlightenment of humanity is a constant effort of approximation. From one point of view the moral progress of humanity is the gradual unveiling of God; just as from another it has been called a becoming like unto God.

But of these three points of view, which place the moral centre respectively in the reasonable self, in the social community, and in God, the last as it were keeps in the background as the ultimate arbiter, and does not enter as a factor into the process. He is the last judge, not the immediate referee: still less a party in the contest. He works through the two subordinate principles, his two visible representatives, the state and the individual reason: neither impeccable, and yet both indispensable. Through means of the community the selfish involution of the intellect is in part removed: there grows up by slow degrees the distinction between what is for individual interest and what is for the common weal. At first naturally with many drawbacks: for the common weal is readily identified with the interest of the stronger and dominant part of the community, and it is only gradually that these anomalies are discovered, and still more gradually that they are set right. And even when the inequalities within the state have been removed, they operate between different states, where particularism still has its place. Laws indeed to a certain extent hold good with some uniformity even beyond national and state limits: there are fundamental points of agreement, for example, between the civil and criminal codes of different countries. But political divisions keep up to a considerable degree the old inequality of special and private interests: and with these political divisions the religious often go hand in hand. All of these influences interfere with the full realisation of the true centre and universal source of human life; they prevent the revelation of the universality of human nature in a complete brotherhood of all men. If morality begins with the love of the brother whom we have seen, it culminates in the love of God whom we have not seen: if it begins with the recognition however imperfect of the

solidarity between man and man, in some limited degree, it must ascend to the recognition of a great brotherhood of all times and generations, an ideal and abiding foundation in which we live and move and have our being.

It is under the stimulus of sociality that the moral instincts are awakened. There is abundant evidence that the sense of duty, and the voice of conscience, owe their contents and even peculiarities of form to the medium in which they grow up. But the same may be said of intellectual and æsthetic judgments no less than of moral. It is under the influence of distinctions already fixed in language that the child perceives the individual objects of sense around him: he enters upon the inheritance of a classification that has been gradually made. And that classification itself was originally due to the co-operation of individual minds, correcting their inequalities and peculiarities. The development in every sphere of activity and culture is under the sanction and the control of the body politic. The individual movement is subject to the condition of recognising the common will or judgment as an essential element. No scientific proposition, for example, will dare to pretend independence of general assent from all who can understand it. But nobody would, therefore, assert that its authority is derived from the social acceptance which attends it. And so in morals. Here too, authority may lay down duties: and these derive their sanction from the force of the collective body:—just as certain pseudo-scientific dogmas derive it from the same power. But the moral obligations strictly so-called do not derive their authority from society, though the quasi-legal enforcement of those obligations is first exercised by society. Their moral character depends on the recognition by the reason of their essentiality to what is found to be the higher kind of life. They are arrived at through experience—social experience; but they pre-suppose a form or category—the legislative attitude and power of reason, which is filled up and realised in experience.

But while we recognise the essentiality of the social factor in every aspect of human development, it is needful to enter a protest against a tendency to hypostatise it into a separate power over against individual man. That there is antagonism between society and the individual is obvious. For, on one hand, the so-called society may really be an exclusive association of which the individual is not strictly speaking a member: its laws, to which he is subjected, are then the laws of an alien body. And, on another hand, the society represents an average of opinion from which the individual to a greater

or less extent diverges, and an accumulation of experience to which he has not attained. In the latter case, its action upon him is pædagogic: it exercises an educational function. Still even here the relation is that between the elder and the younger generation, between the majority and the minority. And while, during the one stage of life, the individuals are initiated into the existing laws or mysteries of the craft of the common life, in the other they are supposed to be active in carrying on these laws a step farther. The social laws, though they present themselves at first as antagonist to personal prejudice, are still the work of originative individual wills which make themselves the spokesmen and leaders of their community. It is only because they present themselves as contrary to selfish wishes, and as accepted without distinct consciousness of their origin, that they seem to spring from a more than individual and even more than human source.

The work of moralisation does not stop short at adaptation to existing conditions: it is not merely an adjustment of the individual to the forms and laws which he finds prevailing. For the structural arrangement of society, and the consequent mould in which the conceptions of human life must present themselves, have been the work of accident; not the creation of free wills co-operating equally and fairly, but partially the effects of despotism and violence, of superstition and ignorance. The social organism which would give the basis of morality must be sought elsewhere than on earth: it lies, as Plato said, as a pattern in heaven. The consciousness of true unity and continuity between the individuals of a society was found (even in a nation otherwise headless and disunited) realised in the faith in the national gods, the powers who held ultimate sanction over the fabric of social materials, and in whom there was a shadow from the consuming fire of tyranny, and a shelter from the storm of anarchy. In actual forms of social union this consoling sense of the supremacy of right is scantly present; and, therefore, instead of assigning to the moralist the province of deducing the merit of the virtues from their power of contributing to the welfare of the social structure, it is well to note that the social fabric is the creation of individual agencies, that it is largely an object for correction and improvement, and above all that the social organism, when taken for the standard of ethics is an idea, and has yet to be carried out into fact.

The conception of the social organism is derived from the recent researches of biology. The microscope about half a century ago revealed the fact that animal and vegetable

bodies consisted of cells, each of which surrounded by its enclosing wall had an independent existence, whilst it was also conjoined with others into complex fabrics, or tissues, and thus helped to make up the several organs of the body. Here then was a structure apparently single which yet embraced within it a number of separate beings. And what was true of cells, was similarly true of the several organs. "We must look upon the body," say Virchow, "as an organism of many members, animated throughout: each of its parts works as part of a machine, and yet each of them at the same time has the life, the reason of its action in itself. Many lives are combined in one collective life: many separate existences with independent capacity of living and acting are placed in mutual interdependence." A hint was thus given for interpreting afresh the old analogy between the individual man and the social structure. Human beings were treated as cells in a social organism, as at once dependent and independent: the organism was supposed to have or be the collective intelligence which governed the actions of its elementary parts. An attempt was even made to find an analogue to the tissues in the new conception of a social organism: but the exponents of the doctrine are hardly agreed as to what this analogue precisely is. At any rate, there was a reversal in the old view: for the real life and central force of society was supposed to inhere in the collective body, and the individuals retained only a fragmentary existence.

It was admitted, indeed, that analogy would find the best parallel to the social organism in the lower forms of animal life, where each segment turns into a separate existence when divided from the parent. For it seems clear that in the social organism separation of a part does not imply the death of that part. And yet it is well not to be too dogmatic even on this point. A highly specialised element of the social organism would barely survive if he were deprived of his surroundings and left to pick up subsistence for himself. It is only certain parts of the social fabric which can maintain existence when severed from the parent. And in such a case we may compare the process to reproduction. The parent body can discharge from itself certain germinal forms which in the shape of a colony may preserve independent vitality. In a highly elaborated society, where differentiation of functions was carried far, not any part of the organism could serve to make a new and independent structure, but certainly some portions could. We have heard the story of the Gentleman and the Basket-maker.

But even with these admissions the view seems open to a

further criticism. Physiology tells us of the separate and in one sense isolated structures which co-exist in the body of a human being. But the unity of that body lies in the continuity of life and the feeling of personal identity. This unity is not in any way homogeneous or comparable with the division and separation of material parts. It is unaffected by any hypothesis which represents the united consciousness as a sum of the constituent consciousness of the parts, or as an illusory unification of the single consciousness of the several moments of life. Consciousness is in its very essence undivided: or rather it is itself unity and the force which keeps the divided in one. As we know it, consciousness is connected with individually concrete human beings. A natural tendency prompts us to presuppose a similar principle of unity wherever we find a harmonious adjustment of part with part, similar to our own case. But in this transference we are liable to error. We are apt to suppose a sort of material unity like that which is exhibited in our own living organism. We find a unity in the social structure as it stands in quasi-materialised form before us. In reality, the social organism of which we speak is a stage of consciousness which we do not reach or recognise without an effort. From another point of view it may be called a generalisation from the actual associations—family, church, state,—which we find around us: a something which though in general characters resembling them yet at the same time comprehends them all. As such it exists nowhere: glimpses of it are to be found everywhere: but the full reality has no concrete manifestation.

The body of the social organism is a spiritual body: it exists in thought, and can only be realised as an idea. It is in the first instance a creation of the mind, which no doubt proceeds to give such realisation in concrete form as it can, by the fuller organisation of society. But after all the performance falls sadly short of the reality: we find only fragments and have to construct from them a whole. And further it is from the individual consciousness that the centre of unity comes: that is the true source of life which goes on extending its range of influence, strengthened no doubt by the co-operation of other individual consciousnesses till it spreads abroad in a boundless life, which may be called divine. What happens is not that the individual surrenders himself to an outside comprehensive will, but that he gradually learns to lay aside the isolating attachments which kept him apart, and discovers that he and others are really one. Moral life is not the work of a bureaucracy which transmits

to individuals the orders and dispositions of the central authority of the social organism, but is the spontaneous co-operation of individuals, enlightened by experience and education, towards the harmonisation of human action, the removal of inconsistencies and unnecessary collisions from the path of progress.

The social organism, therefore, is an inappropriate name for an ideal unity. Literally taken it is a fiction. Science working with terms like these is barely in a fit position to throw stones at the Realists of the Middle Ages. A social organism, with its organs and tissues, is a mere abstraction, formed by the help of analogy, and though it may occasionally be useful as a corrective to impatient reformers who believe that they can modify the individual quite apart from his environment, it is out of place as a governing principle of ethics. The true value of the social organism is rather to emphasise the need of studying the moral environment of man. This environment he partly finds around him, he partly helps to make or modify it. But man morally as well as physically has great liberty of choice and change in that environment: he can rise out of it, he can turn his back upon it, and adopt a new social atmosphere, to some extent, of his own. When the voice of the social environment comes to him, with its "They say": his "What say they?" is accompanied by "Let them say". The social environment is not to be identified with a social organism.

Those who use such terms must at the same time admit the double-edged nature of their tools. In the conception of an organism, the independence and originality of the parts from one point of view must be set against their dependent and derivative place in the whole: and the supremacy of the totality must not let us lose sight of the priority of its constituent elements. Otherwise we fall into the confusions which attend the unwary employment of relative abstractions. A thorough metaphysical analysis of the conception of whole and parts must be followed up by a theory of the implications of organic and of ideal unity. It is in such analyses that Hegel rightly placed the fundamental problem of philosophy. But to those who have learned on approved authority that Hegelianism is a worthless figment of arbitrary constructiveness, it is more convenient to conjure with quasi-real and quasi-scientific phrases. The collective will of a social organism is a phrase which slurs over incompatibilities which baffle reconciliation and processes which cannot be easily traced. Yet the collective action only lumps the resultants of a complex group of

actions and reactions of individual wills. It is because our intellectual mechanics fails to calculate the result from the partial effects, and cannot estimate the forces of sympathy and antagonism, that we allow the collective body an influence distinct from the actions of the component units, plus their reactions upon each other.

The phrase social organism, as used to denote the subordination of individuals to their social aggregate and the centralisation of their life and action in the system of this aggregate, is scarcely adequate to represent the ideal character of the principle which underlies and controls the actions of individuals. The action of a society is always describable as a function or peculiarly-constituted compound of the actions of individuals. The only real agents in the process are human individuals. It is in the individual human consciousness that the process of ethics is transacted: the action of soul upon soul takes place only indirectly, through the medium of physical agencies. By the aggregate of these physical agencies, or external goods—such as human bodies, land, machinery, railways, churches, factories, policemen,—the communication between human souls is in various degrees facilitated: and as the fact that they have been so constituted by human needs gives the aggregate a certain unity and interdependence, we may call the whole fabric a social organism, and allow that in the study of it men and women are as much parts of it as the machinery in the mills, or the gold in the banks. For the purposes of ethics, however, the important point is to remember that man, though he builds himself as a stone in this structure, is also and always the builder and even the architect.

Only man builds in two senses. In one sense he builds as the ants do in the ant-hill, or as the coral insects on their rock. His works are ushered into being with the same blindness to ends, with the same unintentionality, which marks the processes of organic nature. Before he has time to reflect, he is forced into action, and the consequences of his action bind him for the future. In his case, as in the rest of nature, the powers and aptitudes he possesses tend to form orderly systems. But this adaptation comes slowly and at much cost. Intelligence steps in to abbreviate the process. It brings into close connexion what previously was merely coexistent: it builds up the several elements into unity, and thus prepares the way for exclusion of heterogeneous and inconsistent elements. When man can thus construct a plan or scheme in which his works may form a part, he works in another and a peculiarly human way. He

is guided by ideas. To them institutions and associations minister constructive material. In consciousness the details of a social organism are invested with a totality which they did not have in their actual and temporal existence. In the so-called real world of space and time, in the sense-world, that organism nowhere exists full and developed: the organism of the ethical idea has its reality from the reason. The unifying systematising power of reason is that light which never was on sea or land,—it is the consecration which thought gives to the world. In the sensuous reality we see one thing and we see another: but it is mind which places causation, which with increasing energy traces connexions between what time and place have separated, and refers them to a governing unity. Such governing unity of the existing materials and forces—the unity which the vulgar eye, engrossed and absorbed in its own special range, fails to recognise—is what is called an idea. As the very truth of the particulars from which it emerges, it serves by its very contrast with the fragments as they exist to suggest reforms to fill up the gaps.

To discover this unity is the discovery of the true self. It involves an act which may be variously described as abstraction, as reflection, as self-knowledge. The mind has to detach itself from its temporary and accidental individuality and to lift itself into its universal element. Intelligence, in order to be free and conscious, so as to act with originative force, must withdraw back from and carry itself beyond its embodiment in concrete interests. The soul that is to discern the true spirit of the times, the real possibilities of action, must retire for a while from the stage of life. The real freedom of will—the power of absolute initiative—must be purchased by self-renunciation. The gift of inspiration—which is but another name for the liberation of intelligence from its sensual bonds—comes to those and only to those who have the heart to isolate themselves from the sweep of the current, and who survey the mystery of life from some vantage ground of speculation. The soul which is to become an agent and not a mere vehicle in the career of human affairs must retire into the desert. Such withdrawal is typified in the "four times seven days" during which the Buddha remained fasting under the tree of knowledge, "enjoying the blessedness of redemption," before he went and preached his new gospel at Benares. It is typified no less in the marvellous detachment of Socrates in the midst of the social and political activity of Athens.

The dawn of morality was the moment in the life of an

individual when he saw that his own selfish interests were not the whole substance of his life. The perception probably came from some shock when one whose life had been closely bound up with his own had passed away, and he felt that the nobler part of himself had gone, and that he had failed to recognise before the grave his full fellowship with the departed. For death has been at many times the revealer of a tie which the jars and distractions of life kept out of sight. At such seasons in domestic life when reflection is aroused, the whole institution of domesticity rises up in consciousness with full and vivid outlines which startle the careless *habitués* of the social structure. It is no longer a mere bundle of precise duties, of details going to make up the tale of a contract, no limited specification of points in which certain things are expected and required. On the contrary the institution becomes "an image of the mighty world": it claims to be felt in every field of activity, to be the focus towards which all action converges. On a larger scale other associations carry out the same process. They realise in various degrees the unity of human kind: making the individuals no longer outside each other, in animal independence (*more ferae*), but members of a common being, dependent on a common life, united by practice which follows their faith in an idea,—an idea which is not seen, and yet supports the conduct of those who "live by admiration, hope and love". Thus in many ways, not less in the lesser circles of social brotherhood than in those greater but yet imperfect unities known as states and churches, man becomes moral, not by the mere aggregation which drifts him into these associations, but by the translation of them into ideas, principles of universal significance, watchwords for which life is to be spent and death faced ungrudgingly.

Yet all ideas embodied in institutions are limited by their range: the simplest and purest associations for common aims look coldly on the Gentiles outside: they generate new and subtler selfishness which hides its unsightliness under the guise of an angel of light. Even on the heights of moral grandeur, where devotion to an idea becomes sublime and pathetic, the old enemy of the soul can whisper, "Ye shall be as gods," and snatch away from high achievement the gracious beauty of unselfish surrender. Asceticism, which checks the cravings of the sensuous nature, leaves open the door for spiritual vanity and worship of the individual soul: and benevolence, which bestows its goods to feed the poor, may yet want the spirit of perfect love. Ever must the idea be revived, in wakefulness and recollec-

tion, of the one ideal and universal state which is also the one universal church; ever, "faith become a passionate intuition" that the Son of Man is also the Son of God, the heir of infinite aspirations, which cannot be realised fully in anything short of universal brotherhood, and in the ultimate conformity of actions to the true reasonable life of collective humanity.

Thus, if man is the portion of a system, with his place and duties dependent upon his position, he is also the creator of the organisation: and it is in his individual consciousness that the dry bones of legal and social rules gain the power of an organic and organising idea. He is not a mere blank sheet on which society imprints the texts which expound its interests. Too often indeed man does little but reflect his environment: and orthodox authority has many means for securing his conformity. And for the average human being the sense of social sympathy when he acts in the general interest is a useful criterion of conduct. But even then, the individual helps to make the verdict to which he conforms: he is in part creator of the social standard. And in other cases the individual may lead the society after him—especially when they see that he is free from selfish motive and has the clear vision of reality. There are times when the individual must set social decisions aside. There is an honour in the eyes of society which stands rooted in dishonour: a social sanction which ought to be withstood. The individual appeals from the society which is, to the society which he sees by the eye of faith, ready to be revealed: the sturdy independent, if his independence is founded upon insight, comes to lay the basis of a new social code: and even the blood of the martyrs certifies the growth of the church. Always the social code requires—if progress is to be the law of life, and if ethics as the science of ideals is to survive—to be extended and perfected by continued discoveries in the immense range of those conditions of true human life, wherein lies the infinite problem for human faculties.

The province of ethics thus divides into two departments. On the one hand, there is the theory of individual man, first, on his natural side, as a subject of psychological investigation, as a creature of sense and emotion and desire: and, secondly, as a reason, with the faculty of ideas and ideals. The theory of knowledge, of its conditions and the evidence they bear to a unity of principle underlying even the senses and feelings,—the doctrine of reason, as the ultimate former of emotion and shaper of action, constitutes what we may call the

logical and metaphysical side of ethics. On the other hand, ethics has to confront the phenomena of society, economical, juridical, and religious,—to examine the relations of the individual to the various forms of social organisation,—to emphasise the priority of the human idea in its totality to the fractional aspects under which it appears in the industrial world, in politics, in churches, and in the pursuit of science. No precise line can be drawn separating the sphere of ethics from that of law or of religion. The moral nature of man is the ultimate standard both for the jurist and the theologian.

When I thus define in two directions the province of ethics, I am reminded of one whom friendship would not otherwise allow me to forget. My predecessor needs no eulogy. But we all need encouragement and light from those who have gone before us on a way which we also must walk. And there are constant temptations to simplify the work of life by shutting the eyes to everything that lies outside one clear and single duty. It is a great thing to have the example of him who did not find it inconsistent with strenuous and profound investigation of those so-called abstract principles, on which rests the very possibility of morality itself, to give earnest and sympathetic attention to all the social movements in which ethical force shows itself, and to do what in him lay to render the idea of human brotherhood a reality. And even for those who could not occupy his theoretical standpoint or find themselves in harmony with the special directions of his work, there is the lesson suggested that this is no time to sit down mourning for an imaginary past, but a period in which the academic association must realise, actually and actively, its *raison d'être* in serving the moral, intellectual, and religious development of the nation and the world. It is well occasionally to look back with grateful affection to the great traditions of our past. It is even more needful to prepare ourselves to take a worthy part in moulding the age to come: solicitous that by the full measure of our abilities, unbiassed by merely scholastic interests, the Oxford of the new generation may be not perhaps more learned or more dignified, but wiser in discerning the main line of public good, readier to co-operate in the movement towards making life beautiful, true and honest, and more generously zealous to become to England without distinction of rank or sect a high court of intellectual and moral justice.

W. Wallace.

VI.—NOTES AND DISCUSSIONS.

MR. H. SIDGWICK ON THE CRITICAL PHILOSOPHY.

A review by Mr. Sidgwick of any philosophical doctrine is sure to contain much of interest for its adherents. His objections, even when directed from the point of view of an outsider, may be taken as fairly indicating some weakness in, or imperfect statement of, the doctrine. In MIND XXIX., he lays before us the first instalment of a comprehensive criticism of the Kantian theory, and those who think that the most valuable philosophic training is to be obtained by the earnest study of that theory, will have an opportunity of judging how a candid inquirer, of independent view, estimates its worth. The introductory article, it is true, does not carry the criticism to the heart of the problem, but it deals with some isolated points of interest and gives a foretaste of the general spirit with which the criticism is animated.

Perhaps it may be allowed to me to say that Mr. Sidgwick's position, so far as can be judged from the article referred to, albeit that of an outsider, seems hardly that of the 'impartial spectator'. Throughout there is a tone of only half-concealed irritation or impatience, evidenced in the ironical compliments to the miscalled "Neo-Kantians"; in the captious remarks on criticism with its small "c"; in the dogmatic utterance respecting Kant's appreciation of his English predecessors; and in the remarkable strength of the epithets applied to some of Kant's positions. At the same time there appears to underlie the whole review a much more definite conception of philosophy generally and of some particular philosophical notions than is compatible with perfect fairness of treatment. The demand that a philosophical analysis of knowledge shall make good its data, its mode of procedure from them and therefore its results, though on the surface formal, may readily and in this case does probably cover a somewhat developed fundamental view. Perhaps it is the presence of some such view that gives to certain statements of Mr. Sidgwick a curiously old-fashioned air. Some criterion is applied the nature of which is not evident on the surface. I am much struck, in this connexion, with Mr. Sidgwick's easy fashion of using and interpreting the data of Common Sense.

Applying his demand regarding the form of a philosophy, Mr. Sidgwick asks what knowledge is accepted by Kant as the presupposition or groundwork of his investigation into the conditions of knowledge. The answer to this being pure mathematics and theoretical physics, so far at least as their fundamental notions are concerned, Mr. Sidgwick, censuring the "Neo-Kantians" for their negligence in omitting to examine the significance of such assumption, proceeds to inquire into its validity. It is with this

portion of the article that it seems possible to deal in isolation; all the rest, with the possible exception of the critical comments on Kant's arguments respecting Space, is preliminary to the future treatment of the central doctrines.

The argument with respect to these mathematical and physical principles is briefly that Kant's acceptance of them as a basis is illegitimate and inconsistent: for (1) no reason can be given why they should be assumed without inquiry while the notions of theoretical metaphysics are rejected; (2) no valid proof of the principles is possible on the Kantian ground; (3) if their truth be assumed as a matter of Common Sense, Kant contradicts his own contemptuous declarations regarding that philosophic resource, and is, by other doctrines of his own, cut off from its aid. Discussion of these points is rendered very difficult by reason of the ambiguous character of the terms which are, perhaps of necessity, employed by Mr. Sidgwick. "Proved," "valid," and the like, are terms about the significance of which one might argue *ad infinitum*, and in respect to Kant's doctrine regarding mathematics there is a special and additional source of ambiguity. To *prove* the validity of the mathematical notions might mean not only to show that these notions have evidence in themselves, that fruitful deductions from them are possible, and that their validity is taken as extending beyond the empirical observations of the thinker who employs them, but to show how such peculiarities are possible. I cannot avoid the reflection that Mr. Sidgwick demands from Kant that as a preliminary for his analysis of experience he shall assume its very results, that acceptance of mathematical notions shall depend upon adequate insight into the grounds of their possibility. Kant's position appears to me sufficiently simple. He takes as empirical marks of mathematical notions, universality and necessity, and no theory respecting the ground of the said marks will alter the nature of the acceptance of them. Apparently Mr. Sidgwick thinks that universality—to take the more patent example—must be based either on absolutely exhaustive survey, or on a theory which shall prove the right to accept part for the whole; from which it follows that, as the first course is impracticable, and the second is the result of the philosophic analysis, universality cannot be assumed at the outset. It appears to me, however, that Kant is right in claiming insight into universality as not merely a quantitative aggregate of separate experiences, but as a qualitative appreciation of the character of the facts experienced. Whatever theory be adopted, the acceptance of such notions as valid for a special order of facts will not be affected; and as mere matter of history, we know that Kant held the same view regarding mathematical notions in conjunction with two quite distinct theories of their possibility.

Mr. Sidgwick's remarks with regard to the rejection of metaphysical notions by Kant do not seem warranted by anything Kant has said. Kant discredits them on the ground that fruitful appli-

cation of mathematical and physical universals has been made, while no such result has followed in the case of metaphysical notions; but all three are placed on the same footing when an inquiry into the grounds of their possibility is undertaken. Moreover, the criterion, which, as the *result* of the inquiry, is applied to distinguish metaphysical from mathematico-scientific notions, does not bear upon the conceptual evidence or even self-evidence of these principles, but on the possibility of realising them in experience. In other words, the theorems of metaphysics are not proved false, but unreal.

Mr. Sidgwick, however, thinks that the criterion is in itself insufficient, and accordingly enters on a somewhat elaborate examination of Kant's theory of mathematical evidence. I find it difficult to follow the reasoning; for Mr. Sidgwick seems to me to overlook certain characteristic features of Kant's method, *e.g.*, the distinction between notion and intuition, and the intermediate place occupied by the schema. It follows from the first that we are not to identify truth and reality; from the second, that we are not to regard the realisation of a rule of construction as a perceived fact. The schema is at once concrete and individual, and yet not an empirical fact, a matter of observation. Perhaps it is because Mr. Sidgwick regards the mathematical intuition as a single, definite *object*, and not as a schema, that he is so astounded and indignant at Kant's expressions in regard to Algebraic processes. He evidently thinks that the *intuition* required by Kant is to be found only in the letters and signs of operation by which these processes are represented. Kant's brief expressions are sufficiently careless, but they are only directed towards the statement, that the intuitive character of all generation of quantities is additionally evidenced by the fact that where the intuition is not a *quantum* but *quantitas* generally, we nevertheless preserve the reference to intuition by employing signs of operations in intuition, signs for subtracting, equating and the like. These symbols are not, as in the case of geometrical schemata, resembling specimens, but representations of general rules of construction in intuition. I can hardly think that Mr. Sidgwick is serious in supposing that it is only because we write algebraic symbols on paper that algebraic processes are assimilated by Kant to geometrical. Mr. Sidgwick appears to hold that algebraic reasoning is distinguished from reasoning in abstract, *i.e.*, from analysis of notions, simply by superior definiteness of the conceptions. I think he will probably find that the definiteness of conception here implies reference to intuition, although a "concrete and individual" image need not be present. Surely Mr. Sidgwick would not suppose that reasoning about a triangle is *in concreto* while reasoning about a chiliagon is *in abstracto*. If so, he has misconstrued a fundamental Kantian distinction.

Supplementary arguments are added respecting Arithmetic and its synthetical character. With respect to one of these (p. 79), it may be remarked that, even though time be involved in the

elementary process on which counting is based, it does not follow that the notion of time should present itself as an integral part of each arithmetical quantity. It is always we who count and yet the notion of ourselves is not part of each arithmetical notion. The other argument is a repetition of an old discussion respecting the well known $7 + 5 = 12$. Mr. Sidgwick thinks this not synthetical, on the ground that $7 + 5 = 12$ is deducible from $12 = 7 + 5$, that this again is deducible from strictly analytical propositions by reversing the statement of the generation of numbers up to 12, and adding the axiom, itself analytical, that a whole is equal to the sum of its parts "taken in any order". On all this it is sufficient to say that the difference of view rests upon overlooking the reference to intuition which is for Kant the mark of a synthetical proposition, that reversal of the series of numbers is only possible on ground of the previous series of syntheses by which they have been generated, and that an axiom which explicitly contains the mark of intuition—"*taken in any order*"—can hardly be declared analytical in Kant's sense of that term. The whole matter of this proposition is well discussed in the older books on Kant and in Riehl, whose treatment is very careful.

Turning then to the universals of physical science, Mr. Sidgwick finds that these are accepted by Kant, apparently on the ground that experience confirms them. But according to this very Kant, experience cannot prove such statements, and if they are taken as dictates of Common Sense, it is forgotten that many philosophers have questioned their validity. Here we have the old ambiguity regarding the term *prove*. Kant's position, I take it, was a very simple one. He finds that in all scientific investigation, in every experiment or observation, certain rules are implied, of scope such that comparison of individual cases cannot be accepted as their basis, and by means of which progress in knowledge is made. The existence of such principles calls for a theory of knowledge which shall offer some explanation, positive or negative, of their ground. The 'safety and certainty' of the physical principles is the condition of no proposition in the theory of knowledge itself.

As to the remaining argument, bringing Kant's expressions before the bar of Common Sense, it has not to my mind any special pertinence. I cannot speak so unhesitatingly as Mr. Sidgwick does regarding Common Sense, which as a rule is wholly unaware of the significance of its own dicta and therefore liable to a distracting diversity of interpretation. In philosophical matters, it probably signifies the sum of what a thinker takes to be true, without being able to render a reason therefor.

It is only right to add that Mr. Sidgwick most fully acknowledges that the central doctrines of the *Kritik* are not dependent on the acceptance, in one sense or another, of these mathematical and physical principles. His discussion of them, therefore, stands on its own ground, and is to be taken as a mere criticism

of Kant's power of dealing with isolated questions. In themselves they appear to me to have only historical importance, and I cannot but think that "Neo-Kantians," as Mr. Sidgwick insists on calling them, do well not to embrangle the exposition of Kant's 'new way of ideas' with an extensive discussion, the very significance of which only becomes apparent in the course of working out the 'new way'. A thinker rarely starts from the logical ground of his theory, and it is, moreover, the very peculiarity of philosophy that it does and must return upon its presuppositions and infuse into them a new significance.

R. Adamson.

KANT'S THEORY OF MATHEMATICS.

Though it is usual to allow a critic to complete his criticisms before offering any comment on them, I ask permission to depart from this course as regards one point in Mr. Sidgwick's "Criticism of the Critical Philosophy" in Mind XXIX., for two reasons: first, because Mr. Sidgwick may perhaps be able to clear up my difficulties before the conclusion of his series of papers; and, secondly, because it seems to me to be of the utmost importance to Philosophy—especially when the Kantian Philosophy is under discussion—that the true nature of Mathematics and Mathematical reasoning should be understood.

Mr. Sidgwick substantially accepts Kant's views as regards Geometry. He differs from the great Critic as regards Arithmetic and Algebra, which are two branches of the Science of Number but which evidently do not exhaust that science though Kant has not in terms referred to Trigonometry, the Differential Calculus, &c. Mr. Sidgwick's objections to the Kantian theory of the Science of Number appear to be two: (1) that the symbolic construction of concepts in Algebra is not essentially different from the symbolic construction of concepts by means of verbal or written signs in Philosophy; and (2) that Arithmetic does not contain synthetical judgments as Geometry does.

To take the last of these objections first, Kant was not bound to prove that $7 + 5 = 12$ is a synthetical judgment. He admits that there are analytical judgments in Arithmetic and Algebra, and if he made a blunder in selecting an example of a synthetical judgment it does not affect his general theory. I do not indeed admit the blunder; but if the existence of synthetical judgments in the Science of Number must be conceded, the question as regards $7 + 5 = 12$ is hardly worth debating. Will Mr. Sidgwick maintain that such propositions as $ab = ba$ (or, in its arithmetical expression, in multiplication it is indifferent which number we take as multiplicand and which as multiplier), Newton's Binomial Theorem, Taylor's Theorem or De Moivre's Theorem are analytical propositions? Or that though they are themselves

synthetical judgments they are deduced by strict logical processes from analytical judgments? Neither of these positions appears to me to be tenable: and if they are not, we must concede the existence of unproved synthetical judgments in the Science of Number; in which case, if that science possesses absolute certainty, these judgments must be absolutely certain although unproved. Granting this, the precise number of such judgments is of little consequence.

Returning now to the former question, Mr. Sidgwick thinks the Algebraist "can no more bring his reasonings '*vor Augen*' by the simple expedient of writing down his *x's* and *y's*, his + and his −, than the Philosopher can by similarly writing down his philosophical terms with verbs, conjunctions, &c., appertaining". I rather apprehend Kant's meaning to be that though the *x's* and *y's* are only symbolical representatives of quantity, their *relations* are exhibited in intuition and that, so long as we are dealing with these relations only, our processes can be verified by intuition. The distinction is not so much in the writing down of the symbols as in the processes which we perform on them when they are written down. If I sought to expand $(a + b + c + d)^3$ by a mere calculation in my head, I might easily forget or overlook one of the terms when making my final tot, but this error is almost excluded when the characters stand out before me on paper. Nothing similar to this occurs in Philosophy. The relations of the World, the Soul, and God cannot be exhibited in intuition, and in fact (according to Kant) cannot be discovered at all. Let me add that even the working out of an algebraic development in one's head does not seem to be a merely logical process. It involves actual multiplication and addition, the symbols being present to imagination if not to sense.

I confess, however, that I am not quite satisfied with this explanation, and the proof of the identity of the geometric and algebraic processes which seems to me almost conclusive, is an indirect one. It is that which is afforded by what is called Analytic Geometry (the term analytic being used in a sense quite distinct from the Kantian) and also by Trigonometry, in both which sciences we frequently discover new geometrical truths by purely algebraic processes. It is true indeed that certain synthetical propositions must be assumed from Geometry as the basis of each of these sciences. We cannot prove that the equation $ax + by + c = 0$ represents a right line without assuming that in similar (that is, mutually equiangular) triangles the corresponding sides are proportional, and also that the three angles of any plane triangle are equal to two right angles. And the very same geometrical propositions must be assumed in order to show that $\sin\theta$ or $\tan$ is a constant quantity while another well-known geometrical theorem proves the fundamental proposition that $\sin^2\theta + \cos^2\theta = 1$. But though this is true, it seems to me equally clear that we cannot regard all the results of Analytic Geometry and Trigonometry as

mere logical inferences from the geometrical propositions thus assumed. If it were so, the introduction of algebraic symbols and algebraic processes would be a mere roundabout way of drawing inferences from geometrical premisses: whereas in point of fact new theorems have been established in this way which the mere geometer or mere logician is still unable to verify.[1] I have indeed maintained that new truths may be discovered by mere (deductive) logic, for a man may happen to put together two synthetic premisses which had never been thought of in conjunction before, and thus arrive at a really new conclusion. But I think all who have studied the nature of pure (deductive) logic will admit that the synthetical conclusions which can be drawn by syllogism or sorites from a limited number of synthetical premisses is likewise limited, and that their number cannot be really added to by the introduction of any number of analytical premisses. If this be conceded, it must also be admitted that both Analytic Geometry and Trigonometry contain a mass of synthetical conclusions which cannot possibly be explained as mere logical inferences from the synthetical judgments originally borrowed from Geometry. Is there anything analogous to this in Philosophy? Have we any means except mere reasoning for deriving conclusions from our original premisses? And have we any original synthetical premisses to start from? These are questions which must be answered by every one who seeks to assimilate the method of Philosophy to that of Algebra; and he can hardly excuse himself from answering them even if he can show that Kant did not draw the true distinction between the two methods. Kant's conclusion may still be perfectly correct, *viz.*, that the Mathematical method (in all its forms) is inapplicable to Philosophy, and that the indefinite progress which we are able to make in the Mathematical Sciences affords no evidence of our ability to make a corresponding progress—or any progress—in Philosophy. We all know that many accomplished mathematicians are very poor reasoners, while an able logician unaccustomed to mathematical processes, though well aware of all the first principles assumed in Euclid or Algebra, would almost certainly fail to discover or even to prove many well-known geometrical and algebraic theorems. These facts seem to me sufficient to show that the

[1] Sometimes every step of the algebraic process can be translated into a corresponding geometrical process, and the algebraic result is thus attained by a corresponding geometrical one. At other times this is not the case, and the processes though ending in the same result are apparently quite distinct, whereas, in merely logical processes there seems to be but one mode of reaching the same conclusion from the same premisses. The extent to which algebraic considerations have entered into geometry may be inferred when I believe I can safely challenge any one to answer the following question by *pure* geometry:—Given the three sides of a triangle, what is its area? And when the algebraic process involves any power higher than the cube, geometrical representation becomes impossible.

Mathematical Method is distinct from the Logical, and does not consist of pure reasoning. And is any other than the Logical Method applicable in Philosophy? I wait for an answer.

W. H. S. Monck.

IS SELF-SACRIFICE AN ENIGMA?

I am venturing to offer a few remarks on a very old subject. It is not that I have anything fresh to say, but I should like once again to point out a very common and injurious mistake. Mr. Leslie Stephen, in his *Science of Ethics*, has spoken of the association between misery and virtue, and of the general existence of vice and suffering, as a puzzle and an enigma. I should be sorry to appear anxious to weaken the authority of Mr. Stephen's views, since in the main I sympathise with them, and in some of them I even permit myself to feel a personal interest. On the contrary, it is because I believe rash assertions about evil to be fatal to the cause which we both have at heart, and which I may call the *liberation* of Moral Philosophy, that I wish to submit some rather obvious reflections.

When I say that I deny that there is any mystery or puzzle or enigma of any kind which attaches itself to the general existence of suffering and crime, or is involved in the misery of virtuous failure and in the reality of self-sacrifice—I may appear in the light of a presumptuous dogmatist. But my object is to point out that dogmatism and presumption belong to the man who proclaims the enigma, much rather than to myself who deny it. For the assertor does not mean merely that evil is a fact which, like other facts, in the end is inexplicable, and so is a mystery. He must mean that evil is *specially* puzzling, and he implies by consequence that he has some reason which would lead him to expect the absence of this evil. For surely if, like myself, he knew of nothing whatever which conflicted in his mind with the presence of evil, then, like myself, he would cease to find any special mystery in the matter.

Well, if so, the difference between him and myself is that, aware or unaware, he commits himself to a statement which I find to transcend the powers of my understanding; and the question is whether I am obstinately blind or he presumptuously dogmatic. I naturally am forced to adopt the latter view.

Why should evil *not* exist, and why should *not* this or that virtuous man be wretched? You may say that it conflicts with a moral government of the Universe. But, if so, you *assume* this moral government of the universe, and (I must be allowed to add) you assume *very much more.* For you feel that self-sacrifice involves injustice, and that a Moral Governor would not be so unjust. But here you quite forget that justice is one duty amongst other duties, and that a Divine Ruler, like his human

counterparts, might at times find a duty which overrides bare justice. Thus, assuming that the Universe is morally governed, you assume besides that the rule of justice can have no possible exception in favour of another and a higher duty. These assumptions are assuredly not so self-evident that to deny them should entail the charge of presumption.

But I shall be told that the Governor of the Universe is *omnipotent*. Perhaps; but, as I could never find out what that means, I can hardly be expected to admit it as true.

If however the person who finds evil so puzzling, is willing to give up the Moral Governor who never can be more than barely just, I do not see after this how he will succeed in defending his puzzle any longer.

He may say: But all evil, and with it self-sacrifice, are surely undesirable. Yes, perhaps so, I reply; but do you dare to assume that the desirable must be real and the real desirable, and that, if I hesitate to follow, I am presumptuously diffident? And, suppose that I do follow and do assume with you that the desirable must be real, then how am I to know that pain, crime, and self-sacrifice are really undesirable? I do not see how to affirm this, unless I am prepared to say that the world as it stands is worse than nothing, or unless again I have reason to judge that another world, better and more desirable than ours, really is a possible alternative. But for myself I do not possess such knowledge. For anything that I can tell, every possible alternative (if any alternative is possible) might turn out in the end to be *less* desirable. Of course, if you know better, you are right in speaking otherwise; but I should be glad to be shown the foundation of your knowledge. If you wish me to agree that a change in the character of our world is really desirable, you must show me first that the change is possible, and next that it would not bring on some other alteration which we all should regret. And I think I may say that you will not find it easy to perform this task.

And, if I am further pressed with the objection: But possible or not possible, desirable or undesirable, you can fancy a change that you do desire; then I answer: Yes, I can fancy a great deal, spring without winter, eternal youth, and the first flush of passion always at its height. But how can I desire these unless for the moment at least they seem possible, and possible without an overbalancing result of loss and misery? And is this seeming possibility anything better than an illusion? Are you prepared to make our irrational fancies the measure of the Universe? If so, you may be right, but once more I must ask to be excused from following you.

Of course I, like other men, do look upon evil as something which, we may say truly, *ought* not to exist; but then I try to find out what I mean by this phrase. What I mean is first of all that human wills *ought* with all their strength to endeavour generally

to make evil non-existent. And in the second place I mean that it is *one* of our special duties (though not our sole duty, nor even our chief duty) to aim at the putting an end to injustice and to the possibility of self-sacrifice. In this sense we may say that, from a moral point of view, evil and with it self-sacrificing virtue are both undesirable; we must look on them as things which ought not to be. And so far we are agreed. But if you then propose to rush straight away from this moral duty of finite beings to the general nature of the Universe as a whole, if you find courage to assume that *our* moral struggle is in the Universe a rent and a conflict—a conflict which we have reason to think cannot really be there, and so find puzzling—well, if so, I admit that you have justified your enigma, but you must allow me to add that the limits of my intellect seem no limits to yours. You seem first of all to know that the whole is a harmony, and then to be sure that the presence of anything that to us seems a discord must of necessity make that whole discordant. I admire, but cannot follow you.

I am afraid that, when some readers hear a poor 'ontologist' like myself uttering warning cries about the limits of our knowledge, they will think of Satan mighty in the Scriptures or rebuking sin. And yet I feel bound to submit to their attention that very rule which first made me an ontologist, still keeps and will keep me one: *Where you find a puzzle you are making an assumption, and it is your duty to find out what that assumption is.*

F. H. Bradley.

MR. H. SPENCER'S CLASSIFICATION OF COGNITIONS.

The works of Mr. Herbert Spencer have probably aroused more opposition and elicited more criticism than those of any other living writer. The great majority of Mr. Spencer's critics have attacked him from without, that is to say, they have contested his whole system and denied all his main propositions. A few have taken him in flank, and admitting some of his principles have contested the conclusions that he has drawn from them; but, so far as I know, he has not yet had to withstand the charge of failing to carry his principles to their logical and legitimate result.

While I am conscious of the extreme temerity of challenging Mr. Spencer upon his own ground, I am sustained by the consciousness that I am more Spencerian than Mr. Spencer himself, and by the belief that his splendid discoveries have a wider application than even he himself allows.

"The presentation of Intelligence as an adjustment of inner to outer relations that gradually extends in Space and Time, that becomes increasingly special and complex, and that has its elements ever more precisely co-ordinated and more completely

integrated, leaves us with a conception which obviously requires further development. The various degrees and modes of Intelligence known as Instinct, Memory, Reason, Emotion, Will, and the rest, must be translated in terms of this conception. If, as above alleged, the several grades of Mind and its component faculties are phases of the correspondence and factors in the correspondence, they can be interpreted as such." So says Mr. Spencer, and so upon his showing I thoroughly believe; but when he subsequently undertakes the classification of "the several grades of Mind and its component faculties," he abandons altogether this presentation of Intelligence as an adjustment of inner to outer relations, and adopts instead of it the principle of representation; classifying the mental faculties not with direct reference to their correspondence with circumstances in the environment, but with reference to their degree of representativeness. That such a principle is erroneous as a basis of classification, Mr. Spencer's own words, as quoted above seem to me to sufficiently indicate, and that the resulting classification is faulty—grouping together widely different faculties and separating those that are closely alike—I shall now endeavour to show.

Mr. Spencer's classification of Cognitions is, as is well-known, as follows :—

"*Presentative Cognitions*; or those in which consciousness is occupied in localising a sensation impressed on the organism—occupied, that is, with the relation between this presented mental state and those other presented mental states which make up the consciousness of the part affected; as on cutting one's finger.

Presentative-representative Cognitions; or those in which consciousness is occupied with the relation between a sensation or a group of sensations and the representations of those various other sensations that accompany it in experience. This is what we commonly call perception—an act in which, along with certain impressions presented to consciousness, there arise in consciousness the ideas of certain other impressions ordinarily connected with the presented ones: as when its visible form and colour lead us to mentally endow an orange with all its other attributes.

Representative Cognitions; or those in which consciousness is occupied with the relations among ideas or represented sensations, as in all acts of recollection.

Re-representative Cognitions; or those in which the occupation of consciousness is not by representations of special relations, that have before been presented to consciousness; but those in which such represented special relations are thought of merely as comprehended in a general relation. Here the concrete relations once experienced are, in so far as they become objects of consciousness at all, only incidentally represented, along with the abstract relation which formulates them. The ideas resulting from this abstraction, do not themselves represent actual experiences; but are symbols which stand for groups of such actual experiences—represent aggregates of representations. And thus they may be called re-representative cognitions. It is clear that the process of re-representation is carried to higher stages, as the thought becomes more abstract."

As to the first class, that of Presentative Cognitions, Mr. Spencer would surely be himself the first to admit that all cog-

nitions, even those here classed as Presentative, contain represented elements. When I cut my finger the sensation of smarting pain is indeed presented, but the mental states that make up the consciousness of the part affected, although many of them are presented, yet include also a crowd of others that are wholly represented. Mr. Spencer has elsewhere worked out with unrivalled analytical skill the process by which an individual builds up a knowledge of his own organism; and the mental states which make up the consciousness of the part affected must include representations, more or less distinct, of all those muscular, tactile and other sensations by which this part became known as distinguished from other parts. That such cognitions as that instanced above require a separate place in a classification is clear, but that they can be classed as wholly presentative cannot be admitted.

The class of Presentative-representative Cognitions is susceptible of division into two, by a distinction which, thougn not at all sharply defined, is yet very important. Those cognitions, of which Mr. Spencer's example of tne orange is a type, and which constitute the class of ordinary percepts, form only one of these divisions. Suppose, however, that the object presented to my senses, instead of being an orange, is a bael fruit, and suppose that this object is quite new in my experience. After an examination of the fruit, followed perhaps by an examination of the parent plant, I decide that, although not an orange, it belongs to the order Aurantaceæ. In this case it cannot be said in the terms of Mr. Spencer's classification, that consciousness is occupied with the relation between a sensation or a group of sensations and "the representations of those various other sensations which accompany it in experience;" for the group of presented sensations composing the consciousness of the bael fruit has never been experienced before. Yet consciousness *is* occupied with the relation between a group of presented sensations—those answering to the characters of the fruit—and a group of represented sensations answering to the characters of the natural order Aurantaceæ. Hence, while the cognition is undoubtedly Presentative-representative, inasmuch as one term contains presented elements while the other does not; yet it is excluded by the accompanying definition from Mr. Spencer's group of Presentative-representative Cognitions.

In the next class—that of Representative Cognitions—Mr. Spencer includes "those in which consciousness is occupied with the relations amongst ideas or represented sensations, as in all acts of recollection". It seems clear from this expression, as well as from the name of the group and its position in the scheme of classification, that this class includes representations of the previous classes only; the word 'or' appearing to mean that the term 'represented sensations' is an equivalent substitute for the term 'ideas'. If this is a correct interpretation of Mr. Spencer's

meaning, the group is open to a double objection. In the first place it includes more than acts of recollection. For if I am unable to determine the natural order of the bael plant while it is actually under examination, but upon subsequent reflection, when I no longer have it before me, I am able to refer it to its position, it is clear that this is a cognition in which consciousness is occupied with the relations of represented sensations. The represented sensations corresponding with the characters of the bael fruit form one term of the relation which constitutes the cognition, and the represented sensations corresponding with the characters of other plants of the natural order Aurantaceæ form the other term. Yet this determination of the natural order of the plant is not an act of recollection. It is a process of reasoning; and hence, though it is strictly representative, it is excluded from Mr. Spencer's class of Representative Cognitions. The artificial character of this classification is well demonstrated by the same example. If I have both the bael plant and other Aurantaceous plants before me, the determination of the natural order of the former is a Presentative Cognition. If the bael plant is present, while for the characters of other Aurantaceæ I have to depend on my memory, the same process is a Presentative-representative Cognition: while if the bael also is remembered the same process belongs to yet another class, that of Representative Cognitions. To return to the consideration of this class, not only does it exclude cognitions that are strictly representative, but it includes also cognitions of the highest degrees of re-representativeness. For it is manifest that cognitions of the most abstract and re-representative character admit of recollection even more perfectly than do cognitions that contain presented elements. As the remembrance of a presented sensation is never as vivid as the presented sensation itself, so the cognition into which a represented sensation enters, can never be as vivid as the cognition in which the sensation was actually presented. But, on the other hand, a highly re-representative cognition may be as vivid during its remembrance as during its original conception. If Mr. Spencer meant to include among Representative Cognitions the recollection of re-representative cognitions, then I would submit that not only is the definition imperfect, but that the position of the class of Representative Cognitions should be above instead of below that of Re-representative Cognitions; since if these latter are remembered, that is, represented, the remembrance adds one more grade of representation to their already highly re-representative character.

From the foregoing considerations it appears that Mr. Spencer's departure from his own principles has been productive of error, that there is an additional principle beside that of the degree of representativeness which should guide us in the classification of cognitions, and that this other principle is actually the more fundamental and important of the two, and must govern the

primary divisions, while the degree of representativeness may well form a subsidiary principle for the demarcation of the sub-divisions.

Bearing in mind Mr. Spencer's proposition that Intelligence is the correspondence of Relations in the Organism with Relations in the Environment, the classification of Cognitions that I would propose is as follows :—

Class I.—*The Cognition is the revival in consciousness of a previously established Relation.* Cognitions of this class admit of division into three sub-classes.

a. Both terms of the revived Relation contain presented elements. This sub-class is coextensive with Mr. Spencer's class of Presentative Cognitions. But the form of statement here adopted avoids the inaccuracy which appears to me to exist in his definition of that class. In the case which he instances of the cut finger, there is a relation established between the presented sensation of the smart from the wound, and the mental states, some presented and some re-presented, which make up the consciousness of the part affected. While both terms contain presented elements, only one is entirely composed of them, the other being partly represented. Cognitions belonging to this sub-class are those Percepts which, being of the lowest and least differentiated form, merge on the one hand into Sensation and on the other into Reasoning.

b. One term only of the revived Relation contains presented elements. This is the process of Perception in the ordinary sense of that term. The difference between the Perception of an orange and the classification of a bael fruit clearly is this. The group of mental states corresponding with the group of characters—of colour, form, size, &c.—presented by the orange, has previously been brought into relation with the group of mental states corresponding with the other characters—of succulence, odour, texture, &c.—which are not now presented but are represented in consciousness; and the revival of this previously-established relation is the process of Perception. On the other hand, the group of mental states corresponding with the characters presented by the bael fruit has never before been present in consciousness. It has to be brought into relation with other groups of mental states, either presentative or representative, until a group occurs with which a relation of similarity can be established. The establishment of this new relation constitutes a process of Reasoning, and the character of the process is not affected by the presentative or representative character of the terms which are brought into relation. The next time that the bael fruit comes under notice it is *perceived* to belong to the orange family; the perception being the *revival* of the relation which was established on the first occasion. Of course, colloquially speaking, the fruit was perceived the first time it was seen; but the perception amounted only to its perception as a

solid vegetable product, probably a fruit. That is to say, so far as it resembled other solid bodies, other vegetable products, and other fruits; in other words, so far as there was a revival of relations previously established between mental states corresponding with similar presented characters, and mental states corresponding with characters possessed but not presented; so far there was Perception. But those cognitions whose terms had not previously been brought together in consciousness, that is to say those by which its characters were found to resemble the characters of other Aurantaceous plants, were processes, not of Perception but of Reasoning. It may be said that since no two objects are precisely alike, nor does even the same object ever present precisely the same group of characters to observation, perception as here defined cannot exist; but this is an unnecessary refinement. As in the external world (assuming for the sake of argument that an external world exists) there is every degree of difference between the groups of characters presented and groups of characters previously experienced, from identity to the widest dissimilarity, so in consciousness there is every degree of gradation between perception and reasoning; but although not sharply demarcated, the processes are none the less broadly distinguishable.

This second sub-class of Cognitions is coextensive with the Presentative-representative Cognitions of Mr. Spencer as he defines them, and with the first of the two groups into which as I have explained above, that class seems to me divisible; and in this case again the view here presented appears to express the nature of the cognition with greater accuracy. For ordinary perception is not a presentative-representative cognition in the sense that one term is wholly presentative while the other is representative. The visible form of an orange, for instance, which enters into one term of the relation constituting perception, is itself a cognition containing elements both presentative and representative. Hence it seems to me more correct to speak of Percepts as cognitions of the first class, one term of which contains presented elements.

c. Both terms of the revived Relation are wholly representative. This is the process of Remembrance. It includes part of the Representative Cognitions of Mr. Spencer, together with re-representative cognitions of all degrees of remoteness from presentation. On the other hand, all those representative cognitions in which consciousness is occupied with the establishment of a new relation between terms, however low the terms may be in the grade of representativeness, and however often they may have separately or in other relations been present to consciousness, since they are excluded from the class, are excluded from the sub-class also.

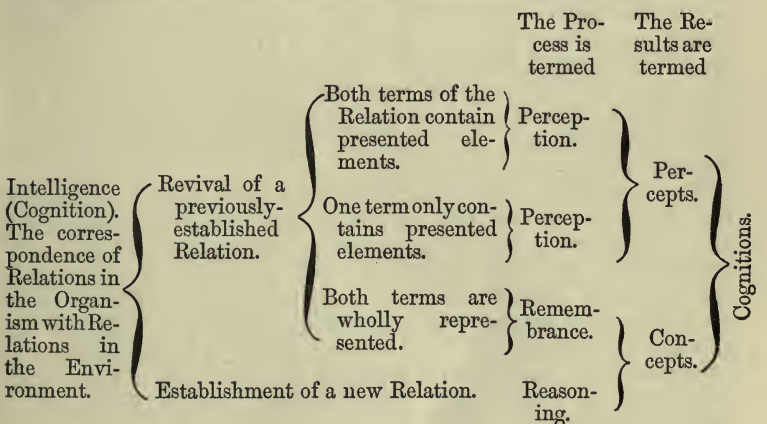
Class II.—*The Cognition is the establishment of a new Relation in consciousness.* This is the process of Reasoning. It may be

carried on between terms of all degrees of representativeness not excepting the very lowest. When both terms are presented, as in the case, to use Mr. Spencer's example, of a cut finger, it may appear to be straining the sense of words to call any part of the resulting cognition a process of Reasoning; yet if that particular spot has never been cut before, there must be the establishment of an altogether new relation; a relation between the presented sensation caused by the cut, and the states of mind, part presentative and part representative, which make up the consciousness of the part affected, two terms which have never before been brought into the same relation: and the establishment of a new relation is Reasoning. That the same condition of Mind has already been adduced as an instance of Perception is an apparent but not a real inconsistency, for it was then stated that the lowest form of Perception merges into Reasoning on the one hand and into Sensation on the other; it is indeed the starting-point from which they diverge. While the mental process by which we cognise a cut on the finger is from one aspect a perception, it is from another aspect a ratiocination. It is indeed a double process. Although the place has, we suppose, never been cut before, it has been the starting-point of innumerable sensations of touch, pressure, temperature, &c., which, combined with innumerable sensations of muscular exertion and of vision, constitute, when represented simultaneously and with various degrees of vividness, the complex mental state forming consciousness of the part affected. On the other hand there have been previous experiences of cuts, which enable a new experience of a similar character to be classified with them and distinguished from sensations accompanying other injuries. Now what occurs in the mind when the finger is cut? There occurs, as has been said, a double process. There is (1) the revival of a previously-established relation between some sensation and the group of mental states which make up the consciousness of the part affected; and there is (2) the establishment of a new relation between the quality of this sensation and the quality of other represented sensations which are known to have proceeded from cuts. There is thus a process of perception and a process of reasoning. That the two processes do occur and are distinct is easily shown. If a blind man were asked how he knew that it was his *finger* that was cut, and not any other part, the question would appear absurd, and if answered at all it would be by the reply that he *perceived* that it was his finger. But if he were asked how he knew that his finger was *cut* and not bruised, he would say that he recognised the feeling to be like that of previous cuts. By thus giving a reason he would make the formal admission that he arrived at this cognition by a process of reasoning. Doubtless the process may virtually be called one of perception, and the distinction here made is an analytical refinement, but it is a not inapt illustration of Mr.

Spencer's doctrine that Perception, Remembrance, and Reasoning, distinct as they are in their developed forms, blend at their origin and spring from a common root.

Like the first class of cognitions, the processes of Reasoning and their results admit of subdivision according to the representativeness of the terms between which the relation is established, but unlike that class these subdivisions do not admit of precise definition. Whether the bael fruit is classified from actual comparison of its presented characters with those of other Aurantaceæ, or from comparison of its presented characters with the remembered characters of these; or whether its characters as well as theirs are remembered, makes a marked, but not a material difference. Nevertheless, since, "as the process of representation is carried to higher stages, thought becomes more abstract," the degree of representativeness forms an index to the elaborateness, complexity, and abstractness of the reasoning.

The following table shows clearly the classification proposed:—



I trust it will be apparent from the tone of the foregoing criticism that it is written in no carping or caviling spirit. Believing as I do that Mr. Spencer's System of Synthetic Philosophy is an expression of the highest development that the human intellect has attained, it would be strange indeed if it were so. But it is no disparagement to a worker whose field of operations extends over two universes—the universe of material things and the universe of mind—if an acre here and there is cultivated somewhat imperfectly; or if, when the territory opened up by him comes to be parcelled out in plots, each of which engrosses the whole labour of a worker or a band of workers, small irregularities of the surface come into view which were overlooked in the more extended survey.

Charles Mercier, M.B.

VII.—CRITICAL NOTICES.

Physical Metempiric. By the late Alfred Barratt, author of *Physical Ethics.* London and Edinburgh: Williams & Norgate, 1883. Pp. xxvi., 311.

This volume contains all that could be printed of a work upon which the late Alfred Barratt had been engaged for some years before his sudden and untimely death in 1881. Mrs. Barratt has prefixed a short memoir of her husband, giving a simple and graceful account of his early distinction and unceasing intellectual activity: the memoir also contains recollections by Prof. Jowett and other friends. Every one will remember Barratt's contributions to Mind some four or five years ago. These essays, which nave been reprinted as appendices to the present work, were published chiefly to defend or explain the doctrines of his first work on *Physical Ethics:* with which again this posthumous treatise is closely connected; for the germ of it is to be found in an appendix to the author's earlier one. On my mentioning to him once the stimulus I had received from that portion of his writings, he said that he now thought he saw his way to carrying much further the speculations there initiated. He must then have been engaged with *Physical Metempiric.*

The very title will to many readers seem like a contradiction in terms: Metempiric they have been accustomed to regard as a wearisome region of speculation and endless debate, contrasted with physical science by the unreality of its object, its uncertain methods and its vacuous results. Those, however, who read farther will acknowledge that, as understood by the author, this collocation of terms in the title is justified by the contents. The book gives a more definite form than has hitherto been assigned to a theory of the ultimate nature of the world which, whether or not it be finally accepted, has already presented itself dimly to many minds, and seems to belong to the speculative tendencies of our age. It is closely related to the doctrine of Mind-stuff, often discussed in this Review and elsewhere.

Our author's preliminary division of the field of human knowledge and inquiry needs the attention of any one who would understand the sequel.

"All possible objects of speculation [he says] lie wholly within, or wholly or in part outside, experience. The former region, *Empiric,* has two divisions, Physic and Metaphysic. *Physic,* or Physical Science, is the science of the external universe, or objects in space. *Metaphysic* includes the whole remainder of Experience, or the knowable; that is to say, first, *Metaphysical Science,* which comprehends both the sciences of the inner experience (such as Pure Logic and Pure Psychology) and also the Psychophysical Sciences, which deal with the special relations between inner and

outer, such as the science of sensation and the science of action (of which Ethic and Politic are parts); and, secondly, *Philosophy*, which treats of experience as a whole, its nature and its relation to its parts. *Metempiric*, on the other hand (if I may adopt a convenient term of Mr. Lewes's), includes all speculations which are not directly or indirectly verifiable by sensation, which therefore transcend Experience and lie in the region of the Unknowable" (p. 1).

To appreciate the bearings of the divisions and definitions in this passage we must grasp firmly the meaning of 'Experience' as there used: it is limited to the private experience of each individual. To each man, therefore, the experience of every other, being unverifiable in sensation, transcends experience and is unknowable. Physic and Metaphysic, then, deal with the world as it is known to anyone in one's own experience; but the unknowable region of other consciousness belongs to Metempiric: and the purpose of the book is, in brief, to set forth a theory that the ultimate nature of things or noumenal world is such other consciousness or feeling, of which the world of matter moving in space is phenomenal.

This metempirical theory the author argues and explains by means of the 'Physical Method'. Until recently, he says, Physical science was the only department of knowledge which was either certain or exact or progressive; and this advantage it had because in its region alone measurement and experiment were possible. Metaphysic and Metempiric on the other hand made no progress, chiefly because they did not see how to guide their inquiries by Physical evidence. But lately this difficulty has been overcome, and Metaphysic has been revivified by taking the physical phenomenon which accompanies every conscious state as its *symbol;* by which means we are able as in Algebra "to work in terms of the symbols and thus arrive at results in terms of the symbols, which have only to be retranslated to be true of the states of consciousness which they symbolise. . . . As the eye can study itself through its phenomenal reflexion in a mirror, so by the help of this method the mind is able to study its own working and history through its symbolism in physiological and other material phenomena." By this device the certainty and exactness of the Physical Method have been introduced into Metaphysic, and considerable progress has already been made there, especially by Mr. Spencer and by the German Psychophysicists. In *Physical Ethics* Barratt himself applied the Method to the sphere of Morals, and the object of the present work is to do the same for Metempiric.

To the Positivist's preliminary objection that all speculations transcending experience are to be avoided, he replies that in fact no one does or can do so, and therefore it is desirable that the form in which such beliefs are held should be as reasonable as possible, and what is reasonable must be decided after argument by experts. As for the data of Metempiric everyone recognises

them; for the first and most fundamental of them is the assumption by each of us that there exists experience or consciousness other than his own, "the denial of Solipsism": so much everyone necessarily assumes. The belief probably arises from the connexion of one's own experience with a body, the perception that other bodies are similar to one's own, and the inference that they are connected with other consciousnesses or systems of experience. However originating, such a belief is necessary to harmonise our view of nature, and still more our relations to Society; and the above origin assigns to it the same basis as all beliefs have, even the most assured—namely, Association. But if those considerations do not prove it, there is no other way of doing so. It is strictly and absolutely unverifiable: by no means can another's consciousness become a part of my own or enter into my experience. "If in my picture which I call the universe I find it necessary to draw other men painting too, no doubt I make them painting with real paint, but it is my paint all the time; that part of my picture which depicts their pictures is in no way different from the rest of it, and does not go at all to prove their existence outside my picture." The most austere Positivist, then, believes in other consciousness, in that whose existence is unverifiable, and is therefore a Metempiric.

The Metempirical system that starts from such a datum will of course be very different from those doctrines that have made the unknowable region something different in nature from the knowable: it is only an extension of the knowable beyond our individual knowledge; so that the relations among the parts of the unknowable must be similar to those of the knowable. Applying the Physical Method we see at once that whatever has been hitherto proved by that method in Metaphysic as to the conscious states of the inquirer himself, may now be extended to other consciousness (though there can no longer be direct verification) and taken up into Metempiric. The most suggestive principle obtained was the evolution of consciousness; which, whilst it could lead the Metaphysician only as far as he was able to verify the inferences by observation of his own consciousness, the Metempiric can follow much further: for (as was observed in *Physical Ethics)* "if a man believes in the existence of consciousness in any object that is not exactly identical with himself, he has no right to draw an arbitrary line at any particular degree of difference and to assert that within that line is consciousness but without it none". Hence a belief in the universality of consciousness has long been spreading; and the Physical Method now enables us to lay at the foundation of Metempiric the principle that "Consciousness is coextensive with Matter, or rather with the Motion of Matter". As every motion is a link in the causal chain of the universe in space, so every state of consciousness is the "result of other conscious states, not in the organism alone but running alongside of the physical

series of motions into the inanimate world, into the flux of forces which constitutes the physical universe; they must be components of another conscious universe, of which the physical is only the sign and the phenomenon. . . . The universe of matter is phenomenal, that of consciousness noumenal . . . the former is the universe as it appears, the latter as it is in itself." We thus obtain an explanation of the nature of Things-in-themselves, a belief in which is nearly as inevitable and ineradicable as that in other consciousness, but equally incapable of proof.

If now we inquire into the ultimate nature of consciousness, the Physical Method points us to the ultimate nature of Matter as far as we know it, that is, to the doctrines of Molecular Physics. Barratt assumes that the principle of Atomism is established, at least that matter may be described as ultimately consisting of "centres of force or motion". Corresponding to these, then, we must suppose centres of Consciousness, which may be called Monads; and the noumenal universe we must imagine to consist of an infinite number of monads, of which the material universe with its infinite atoms is phenomenal. Possibly, indeed, this constitution of the world is not quite ultimate: it has been suggested that atoms may have arisen out of an uncentralised continuous substance; and, if this be ascertained, the Physical Method will regard monads as having been evolved from an uncentralised continuous consciousness. But meanwhile it is convenient to begin with atoms and monads, and see what we may learn about the one from what we know of the other. If all ultimate atoms are alike, so are all monads. As the total mass of the physical universe is constant, so is the number of monads: and as each atom so each monad is eternal and unchangeable. Motion of an atom is the phenomenon of feeling in a monad, change of motion represents change of feeling, velocity symbolises intensity. The ways in which atoms interact are signs of the ways in which monads affect each other. Force impressed on an atom corresponds to sensation in a monad; force expressed to volition: not that the feelings of a simple primitive monad amount to the distinction of sensation and volition, but only to the rudiments of what will subsequently appear in those forms of consciousness to a perceptive monad at the centre of an organism. For an organism is an arrangement of atoms, *i.e.*, noumenally, of monads, by which the incident forces of the universe are co-ordinated in relation to some central monad: evolution of the organism brings to the central monad or Ego an extended perception and conception of the universe as an object, and this is attended with the growth of self-consciousness.

The perception of the universe as an object, and self-consciousness in its whole extent, are built up out of simple feelings. And every feeling in one monad is caused by change of feeling in another. Impressed feeling or sensation in monad A is the effect of a change or expression of feeling, or rudimentary volition in

monad B; but the change of feeling in B appears to A as a motion of the atom which is the phenomenon of B. To perceive the motion of an atom, however, is only a kind of feeling: the phenomenon of B's feeling in A's consciousness is itself feeling, and therefore noumenal; and this again appears to B and to every other monad as atomic motion. Hence there are not two worlds, a noumenal and a phenomenal, but only one with a distinction of aspects—noumenal to each internally and phenomenal to all externally.

It will have been noticed that this theory regards feeling as producing motion, not motion feeling. It opposes equally the common notion that feeling is an effect, consequence, or sign of motion, and the view recently taken by some philosophers that feeling and motion are simultaneous, and only different sides or aspects of the same fact. There is nothing, our author says, to show them to be simultaneous; the popular belief that they are in sequence is true, only the terms of the sequence are in an order the reverse of what is supposed. Feeling, in fact, is the cause of motion, and not merely cause in the sense of antecedent, but "efficient cause" in an intimate and essential way. The notion of causation as the mere relation of antecedent and consequent is taken from the interaction of phenomena only, and of them as such it is true and sufficient; but in sensation and volition we are conscious of something more than this, we have to do not with a mere relation of phenomena among themselves, but with the relation of noumena and phenomena, and efficient causation seems to be a good name for it. Indeed, of this efficient causation, the causation observed between phenomena is itself phenomenal: for phenomena consist of atoms and their motions, and these are only signs of monads and their feelings. If one phenomenon produces a change in another, that is a sign that a feeling in one monad has caused a change of feeling in another. If a moving body seems to cause a feeling in me, I must interpret it thus: the movement is first an effect or phenomenon of feeling in some other monad, and secondly it is identical with my own feeling, which in turn will have corresponding phenomena to other monads, and so on without end. How the object is identical with my feeling, differing not in itself but only in its associations, and thus obtaining a different name, may appear from this:

"Any conscious state may either be connected through association with ideas of other states, so that what fills consciousness is the relation between it and others, whereby it is perceived as an object external or not, *or* it may at once seek expression in action, perfect or imperfect, in which case, so far as it is perceived at all, it is referred to the whole Ego, and not to other separate states; it is thus not an 'object' or quality but an emotion or feeling. To take an example: if we go near a fire, the resulting state of consciousness may become either the 'object' fire or the 'feeling' warmth, according to the trains it sets up; if it set up a cognitive train, it is an object; if an active, a feeling or emotion" (p. 203).

And how a moving object is a phenomenon of feeling in some other monad may appear if we suppose that the moving object is an air-wave impinging on the ear and setting up a nervous current, and that when this reaches a certain part of my brain I hear a sound: the ordinary view treats the sound as a consequence of the nervous tremor; but is not rather the nervous tremor a part effect of sound-sensation existing beyond our organism, *i.e.*, in other monads?

How else "do we represent this sound when outside us, that is, as an external object or force? Surely not as aerial vibration alone, for that is not the whole force; it is hardly even part of it: for except as to certain tactual ideas which are practically evanescent, these aerial vibrations are light reflected from the vibrating particles, and manifesting them (in idea) to the eye: when we speak of sound as an external force or energy, we include in it not only its visual part, but its audible part too. But if this be so, where is the difficulty? The visual elements in the external object 'sound' produce the visual vibrations in ear and brain, the audible element produces the audible sensation of hearing. The process or 'message' to the ear gives off at each point processes to the eye, and that to the eye gives off processes to the ear. And of these the eye, happening to be the keener, can trace the progress of the message to the ear, the auditory centre; but if our ear were keen enough, it also could trace the progress of the message through the eye to the optic centre" (p. 210).

Visual and tactual feelings are so much more universal and definite than others that the external world, including the nervous system, is regarded as primarily consisting of them; but to regard the other sensations as caused by them is unwarranted. "There is nothing in visual states essentially different from others, or that makes it mysterious how visual states should accompany or even cause or pass into other conscious states, or *vice versâ;* in fact this is a process continually observed in what we call association, which is really nothing else than one state causing or becoming another" (p. 209). Hence of course the forces or movements which are the phenomena of mental states are "continually transformed and retransformed, each of the forces affecting a special sense is, on its way to the organ of sense, perpetually sending out little rills of other forces which affect other senses, so that the audible message is visible and the visible audible" (p. 212). The universe as a phenomenon, then, is something felt, and the cause of that phenomenon is feeling.

It is impossible, of course, to give any notion of the details of this remarkable system, or of the interspersed comments on conflicting views, and shrewd replies to anticipated objections; which prove the author to have been equally ingenious in self-defence, in criticism, and in construction. No inconsiderable portion of the present work is occupied with discussing the views of Green, Prof. Caird, and Mr. Balfour; and it was to have been supplemented by a comprehensive survey of all past and present opinions that offer any comparison with his own, from Hylozoism to Mind-stuff; but this latter portion was not ready for publication. Had he

lived, it is probable that he would have gone on to construct a Philosophy of Politics and a Philosophy of Religion. Some hints of the latter doctrine are to be found in ch. ix. of the present volume, on Monadism and Monism, and in the fragments of his preface. For the Politics, Appendix II. may be consulted: and to this a special interest attaches, since it shows that the character of his mind was not to be hastily inferred from a superficial acquaintance with *Physical Ethics*. The Egoism conscientiously maintained in that work was not regarded by him as alone an adequate guide to conduct. Much of his difference from Utilitarians was upon a question of classification: he assigned to Politics that consideration for the happiness of mankind at large which they usually include in Ethics.

That an unfinished work should be faultless in style, or even securely fenced against all objections to its main theses, is not to be expected. Yet as to style the want of revision may not be an unmitigated evil: for the scrupulosity that begins by removing every blemish, often goes on to disfigure many a grace, and arrives at pedantry in seeking precision; while the spontaneous utterance of this book, though seeming at first too ample and unrestrained, flowing like an inundation rather than a river, proves on closer acquaintance to be the natural expression of copious thought, and pleases the more it is read. And even as to matter, if there can hardly be too much deliberation, yet subsequent care will hardly redeem the first wanderings of a perverse or desultory understanding: the worth of a system of philosophy depends upon its primary conceptions; and, these determined, it only remains to elucidate them better and free them from verbal difficulties, to protect them from mistake and conciliate prejudice. In spite of much imperfection, then, in the expository treatment of *Physical Metempiric*, the principal fabric of the argument will probably seem to the reader, as he proceeds, to be always gaining in solidity.

At the outset the word Metempiric is strangely used. Lewes, its inventor, wavered perhaps as to its meaning, but at any rate he would not have applied it to that which may be at present verified in any human experience. To Barratt, however, everything is unverifiable and therefore metempirical that cannot become part of the experience or consciousness of any given person or monad; and such is the position of every other consciousness. Yet every consciousness believes in the existence of others, and is largely made up of representations of them. These points are insisted on at some length with much emphasis, but the reader is apt to treat them as a matter of course; and when they are stated as the basis of what is to follow, he is inclined to suspect a new system of Philosophy whose only postulates are so very reasonable. All he objects to is limiting the word experience to one's own consciousness, when we are agreed that there are other people whose experience is as good as ours: this looks like

an unprepossessing quibble and raises a prejudice against the sequel. I believe, however, such prejudice is misleading: the author in thus limiting the word experience only seeks to convince the Positivists that even they acknowledge something beyond it. His system does not require any such limitation of words: its rational merits would remain whatever they are if all this were forgotten: some other phraseology only would fall away. The distinction, for example, between Metempiric and Metaphysic would disappear: or at most Metempiric would become an Ontological extension of Metaphysic. There seems, indeed, a serious objection to his making Metaphysic include Psychology as a science solely verified by private experience: for if we omit from this science all that depends on our belief in the existence and testimony of other minds, little will remain, and that little will lose much of its certainty.

Again, the conception of the Monad is beset with some obscurity. Its existence is supposed to be indicated by the atom, its symbol: but what is its nature? Barratt sometimes calls it a centre of Consciousness, sometimes a *Träger*, also *Cogito*, *Ich denke*, Pure Ego. Some of these expressions, together with the symbolising atom, and reminiscences of Leibniz, suggest the notion of a spiritual entity, the subject of consciousness: and this clearly would be nugatory; for if we are to have some entity besides consciousness, we may as well take the atom at once and search no further. He says, however, expressly, "the monad is no soul of different nature to matter, it is the inner reality of all material phenomena" (p. 157). In other words, I suppose, it is Feeling: but how can Feeling be a centre of feeling? In one sense every relation is such a centre: whenever feelings match or edge one another, there is a centre of feeling. But if this is the meaning, an atom must be the phenomenon of a relation; and that cannot be, because every change of Feeling is a relation, and change of Feeling we have seen to be symbolised by change of motion. To get at the meaning we must fall back upon the author's suggestion that as atoms may be vortices of ether, so monads may be aggregates of what was at first uncentralised feeling: *i.e.*, they may be mere feeling integrated by association in forms that have been rendered stable perhaps by natural selection. If this be the nature of monads, it seems to me a very fruitful conception, but still to bear as many difficulties as suggestions. How such monads affect one another, ingenuity may perhaps imagine: but why must there be an intervention of atoms, and how can there be? For if atom and monad are really the same, in cognising an atom we have an intuitive knowledge of other consciousness; if they are not the same, Dualism is still with us, and mind and matter would be as good words for me as noumenon and phenomenon, indeed better by some syllables; while to call the opposition only a distinction of aspects will not, I hope, perplex any understanding.

The difficulty about the nature of monads is closely connected with that hard saying about "efficient causation," but this is hardly developed enough to challenge criticism, and really nothing depends upon it. It is enough to notice the reversal of the ordinary doctrine about feeling and motion, and the assertion that motion is the effect of feeling. Barratt has certainly not proved this; and besides many objections that might be urged against it from outside, some arise from within the system. It is admitted that feeling is always preceded by motion, as (for example) a sound by an air-wave striking on the ear; but it is urged that this air-wave is itself preceded by sound arising beyond the organism: similarly with warmth. And possibly common sense agrees to this. But if you prick your finger, what is the character of the feeling in the pin? Besides it was posited that an atom is the phenomenon of a monad, a moving atom of a feeling monad. But movement cannot equally represent all feelings. All different feelings must therefore be phenomenalised in that which moves: an atom must contain phenomena of sound, warmth, smart—qualities of all possible feelings. But there are some feelings which we know only as such, and never as qualities: in these, then, we seem to have direct intuition of other consciousness. However, the atom of physical science is not supposed to have all qualities, but only the muscular, tactual, and visual.

This remark naturally leads to a consideration of the Physical Method, a conception of greater promise, surely, as a clue in Ontological inquiry than any other that has ever been offered. With what modifications it should be accepted, or how far it is likely to lead us in that labyrinth, cannot at present be discussed; and it is impossible, without a strong sense of dissatisfaction at the task, to multiply criticisms to which there can no longer be a reply. For undoubtedly the intelligence that with extraordinary resource foresaw and refuted so many objections could have met with unexpected explanation many more, and would have used them to illustrate the truths they seemed to obscure.

CARVETH READ.

The Concepts and Theories of Modern Physics. By J. B. STALLO. ("International Scientific Series," Vol. XLII.) London: Kegan Paul, 1882. Pp. 313.

Mr. Stallo tells us that he means his book to be "a contribution not to physics, nor, certainly, to metaphysics, but to the theory of cognition". His aim is to purge out the leaven of old metaphysics which still taints modern physics. It is a common belief that modern physics has escaped "from the cloudy regions of metaphysical speculation". He thinks this belief is only in part a just one. The common "misconceptions in regard to the true logical and psychological premisses of science are prolific of errors,

whose reaction upon the character and tendencies of modern thought becomes more apparent from day to day". It is in the true behalf of physics that he writes. It is to further "the great endeavour of scientific research to gain a sure foothold on solid empirical ground, where the real data of experience may be reduced without ontological prepossessions". He is thus, if not a contributor to physics, at least a candid friend of the science. In spite of his seeming disclaimer, therefore, it may be allowed to a mere student of physics to make some answer to his criticisms, so far at least as they bear on accredited physical theories.

We have first to deal with what Mr. Stallo calls the "mechanical theory of the universe in its present form". This theory "undertakes to account for all physical phenomena by describing them as variances in the structure or configuration of material systems". In the light of it "the ultimates of scientific analysis are *mass* and *motion*, which are assumed to be essentially disparate". It thus "involves three propositions, which may be stated as follows:—(i.) *The primary elements of all natural phenomena—the ultimates of scientific analysis—are mass and motion.* (ii.) *Mass and motion are disparate. Mass is indifferent to motion, which may be imparted to it, and of which it may be divested, by a transference of motion from one mass to another. Mass remains the same whether at rest or in motion.* (iii.) *Both mass and motion are constant.*" These, with the assumption of the molecular constitution of bodies, lead to "four other propositions, which may be said to constitute the foundations of the atomo-mechanical theory. They are these:—(1) *The elementary units of mass, being simple, are in all respects equal.* (2) *The elementary units of mass are absolutely hard and inelastic.* (3) *The elementary units of mass are absolutely inert, and therefore purely passive.* (4) *All potential energy so-called is in reality kinetic.*"

The last four propositions are to the author the Quadrilateral of the atomo-mechanical theory, and against it his onslaughts are made. He takes for granted that they form together a single and undivided stronghold which is overthrown when a breach is forced at any point. His method is to throw his strength against the weak places, and to make out that all is won when the weak places fall. This method will do if the solidarity of the theory is a fact and not a mere "ontological prepossession". But it misses its end if the weak places are but outworks, and unacknowledged outworks, after all. The attack on them may be energetic and victorious, but the real stronghold is nothing the worse. Its defenders are not concerned with what happens beyond their lines. This is the answer that any physicist who is familiar with the best and latest teaching in his subject is bound to make to many of Mr. Stallo's criticisms. The chief points made against the Atomic Theory refer to unessential or provisional or discarded parts of it. Its best expounders would yield up most of them without feeling that the central doctrines were at all weakened.

In illustration, let us see how the "four propositions" are dealt with.

(1) The "equality of the elements of mass" is (we are told) an essential doctrine of modern physics. On what grounds? The author shows that he has a good knowledge of modern scientific writings, and on occasion quotes freely and fully from them. But he is hard pushed to find a physicist who will own to this foundation of the science. It would be easy to name half-a-dozen, with Maxwell and Thomson at their head, who theorise as if the exact opposite were the truth. Wundt, Herbert Spencer, Thomas Graham, C. R. A. Wright, F. W. Clarke, are the only authorities offered; they are quoted from magazine articles; each manifestly speaks in a tone of tentative suggestion; none is aware that his suggestion is really an essential foundation of the mechanical theory. We must in fairness ask for better proof that the doctrine is widely held or held at all before we own that our withers are wrung. The fatal argument brought against the doctrine thus foisted on physics is—that "the whole modern science of chemistry is based upon a principle directly subversive of it—a principle of which it has recently been said that it holds the same place in chemistry that the law of gravitation does in astronomy". This is the principle of Avogadro or Ampère. It requires the ultimate small parts of different gases to be of different weights. The answer is that the chemists are probably right; that modern physics has nothing to say against them; and is willing not merely to grant the point but to go a long way towards an explanation of it. So that we escape altogether the collision between physics and chemistry, in which physics was to suffer so grievously (for the author somewhat unaccountably takes for granted that "chemical concepts" must be sound). It is not essential to a consistent mechanical theory that the ultimate small parts or atoms of which bodies are built should be equal in mass. The author says nothing to make it apparent that it is essential. A multitude of facts indicate that the atoms are unequal, and physics takes cognisance of the indication.

(2) The "rigidity of the elements of mass" is the next foundation that must be destroyed. It is no less an "imperative requirement of the mechanical theory" that the atoms shall be perfectly hard and unyielding than that they shall be perfectly equal. To establish this we have a quotation from Newton, who in the *Opticks*, among other guesses, says, "It seems probable to me that God in the beginning formed matter in solid massy hard impenetrable movable particles". Nothing more than this. Modern physics can scarcely be held accountable for the faulty dogma on such slender grounds. What it demands in the ultimate indivisible particles of matter is elasticity, not rigidity. And, as our author admits, two of the most conspicuous hypotheses of the science—the Kinetic theory of gases, and the Vortex-theory of the atom—take account of the elasticity of the ultimate

particles, and go far to explain it. As the author's aim seems to be to involve the current doctrines in mutual conflict, he is unwilling to allow that the two great theories just mentioned have any shadow of foundation. On the Vortex-theory he is especially severe, but he plainly shows that he has failed to grasp it. He cites Maxwell's account of it from the *Encyclopædia Britannica*, and so far as the words go he cites it correctly. But it is a true paradox that one must be something of a mathematician to understand what a *real* theory the Vortex-theory is, and the author is not a mathematician. Like the undulatory theory of light as compared with the corpuscular theory, its consequences flow without subsidiary hypotheses from its initial data. The more these consequences are worked out the more phenomena the theory is found to explain. And the work of deduction is so difficult and intricate that it will be long before the resources of the theory are exhausted. The mathematician in working it out acquires the feeling that, although there are still some facts like gravitation and inertia to be explained by it, the still unexamined consequences may well include these facts and others still unknown. As Maxwell used to say, it already explains more than any other theory, and that is enough to commend it. All the strict consequences of the undulatory theory were not deduced at once, and the formation of shadows and astronomical aberration were at first thought to be inexplicable by it. But closer research changed these difficulties into triumphs. The Vortex-theory is still in its infancy. We must give it a little time. Mr. Stallo's *a priori* objections to it are not very grave.

"It seems to be evident," he says, "that motion in a perfectly homogeneous, incompressible and, therefore, continuous fluid is not sensible motion. All partition of such a fluid is purely ideal; in spite of the displacement of any portion of it by another portion, a given space would at any moment present the same quantity of substance absolutely indistinguishable from that present there a moment before. There would be no phenomenal difference or change. A fluid both destitute and incapable of difference is as impossible a vehicle of real motion as pure space; it is as useless for the purpose of accounting for the phenomena of material action as the quasi-material medium without inertia of which Roger Cotes said that it was not to be distinguished from a vacuum."

This is not hard to answer. That vortex-motion in the universal fluid is not "sensible motion" is surely an objection of the "ontological" kind, such as the author affects so much to despise. If it means that he cannot conceive of himself perceiving such a motion, it is clear that he has forgotten that his organs of sense are but aggregates of vortex-atoms like everything else. And if it is shown that two vortex-atoms can act upon each other so as to change each other's paths and vibrations just as two visible gross bodies might do, the impact of a vortex-atom stick on a vortex-atom head may quite well give rise to the idea of "sensible motion" in the head. No one who has seen two vortex-rings in

collision with each other, or the impact of vortex-rings against a candle flame, can fail to have a lively idea of their sensible motion. In fact the ineffaceable stamp of rotational motion originally impressed on the portion of fluid forming the vortex-ring differentiates it for ever in kind from the irrotational fluid in which it swims. In virtue of its inalienable vorticity the matter of the ring is qualitatively distinguished from the non-vorticose matter round it. A space half-filled with vortex-ring and half with irrotational fluid would be sensibly, phenomenally, really, different and distinguishable from the same space wholly filled with irrotational fluid. Given the vortices in the fluid there are and eternally will be *differences* in it. By virtue of these differences it is perfectly capable of acting as "the vehicle of real motion" and of "accounting for the phenomena of material action".

The author manages to make the Vortex-theory look small by classing it with what he calls an "analogous attempt to dispense with the necessity of endowing the elementary atoms with the intrinsic property of elasticity". This is Secchi's wild speculation on the impacts of hard atoms in rapid rotation. He thought that such atoms might rebound from each other when they met pretty much as if they were elastic. The speculation was founded on a misunderstanding of a mechanical theorem of Poinsot's. The mistake was apparent to any one who looked into the matter; the theory never had the slightest vogue; and it explained nothing. But seven pages are given by Mr. Stallo to slaying the slain. Two pages dismiss Thomson's theory; and the simple reader is left with the impression that, if Secchi's theory is bad on the face of it, Thomson's is worse in the ratio of seven to two. This is an example of the kind of special pleading which mars the author's argument. He is nothing of a judge, he is often a mere advocate; for he makes points when he can, and at times succeeds in blurring over the distinction between valid theory and invalid. Physics counters his second line of attack, then, by denying that it is essential to a true mechanical theory to assume that the ultimate elements of matter are perfectly rigid. Many direct indications show that even in bodies called simple the small parts are not only elastic but capable of definite intrinsic vibrations. And the most fruitful theory of matter yet propounded accounts for both the elasticity and the vibration.

(3) The third essential proposition "that the elementary units of mass are absolutely inert" stands on a different footing. It amounts to this—that motion cannot be transferred from one body to another except the bodies are in contact or are connected by a continuous material medium. In the author's words: "Action at a distance is impossible; there are in nature no pulls, but only thrusts; and all force is not merely (in the language of Newton) *vis impressa* but *vis a tergo*". Modern physics accepts the statement. What is urged against it? Just this, that "science is in irreconcilable conflict" with it. "Action at a distance, the

impossibility of which the theory is constrained to assert, proves to be an ultimate fact inexplicable on the principles of impact and pressure of bodies in immediate contact. And this fact is the foundation of the most magnificent theoretical structure which science has ever erected"—that is, of course, the theory of universal gravitation. Our author makes much of this fact of gravitation; it is the type and symbol, as it is the last resting-place, of "action at a distance". There are other actions of a mechanical kind, such as light and heat, which are transmitted from sun to planet; for them he has no difficulty in conceiving a continuous material carrier. But gravitation is an "ultimate fact," in spite of the protests of all scientific thinkers from Newton downwards. Indeed the author has so realistic a conception of Newton's own quantitative law, that he makes light of Newton's own disclaimer against taking the law for a qualitative fact. In a letter to Bentley, Newton writes:—"That gravity should be innate, inherent, and essential to matter, so that one body may act upon another at a distance through a vacuum without the mediation of anything else by and through which their action may be conveyed through one to another, is to me so great an absurdity that I believe no man, who has in philosophical matters a competent faculty of thinking, can ever fall into it". This is explicit enough. The constant efforts of men of science since Newton's day to account for gravitation without assuming action at a distance tell in the same way. The author reviews them briefly and points out that none of them hitherto have been successful. His triumphant conclusion is that they never will be successful, and that the "mechanical theory" is hopelessly discredited because this "ultimate fact" is inexplicable on the principles of impact and pressure. If gravitation were the only unexplained phenomenon in nature and had baffled scientific research for centuries, this position might be justified. But it is too soon to crow so loudly. Let us consider a little what it is that has to be explained, and in what way the quantitative statement of *how* gravitation acts is connected with the *why*. Professor Lodge has put this so clearly in a recent lecture[1] that I cannot do better than give his words. Newton would have entirely agreed with him.

"If a man explained the action of a horse on a cart by saying that there was an attraction between them varying as some high direct power of the distance he would not be saying other than the truth—the facts may be so expressed—but he would be felt to be giving a wretchedly lame explanation, and any one who simply pointed out the traces would be going much more to the root of the matter. Similarly with the attraction of a magnet for another magnetic pole. To say that there is an attraction as the inverse cube of the distance between them is true, but it is not the whole truth; and we should be obliged to any one who will point out the traces, for traces we feel sure there are."

[1] *Nature*, January 25 and February 1, 1883.

Newton's law of gravitation, endowed by some with a mystic physical reality, simply amounts to this—that as an observed fact two particles of matter when apparently left to themselves will approach each other—and that the rate of change of their motion of approach varies in magnitude inversely as the square of the distance between them. Nothing in astronomy would be altered if every atom were provided with an *angelus rector* who pushed it at every instant with a nicely judged force towards its neighbours. Nothing will be altered if it is found that vortex-rings in an all-pervading fluid are so pushed towards each other by the stresses their intrinsic or pulsating motions set up in the fluid. It is merely for brevity—to Mr. Stallo as to many others a misleading brevity—that the word 'attraction,' with its metaphysical associations, is used in the statement of the law. 'Attraction' in his sense is not a *fact*; much less is it the "foundation of the most magnificent theoretical structure which science has ever erected". But are the vortex-atoms pushed towards each other according to the Newtonian law? No one can yet say. The mathematical difficulties have not yet been overcome, and gravitation is after all but a residual phenomenon compared with the other actions which take place between the atoms. As Professor Lodge says:—

"We must remember how small a force gravitation is. Ask any educated man whether two pound masses of lead attract each other, and he will reply—no. He is wrong of course, but the force is exceedingly small. Yet it is the aggregate attraction of trillions upon trillions of atoms; the *slightest* effect of each upon the other would be sufficient to account for gravitation; and no one can say that vortices do not exert some such residual, though uniform, effect on the fluid in which they exist, till second, third, and every other order of small quantities have been taken into account, and the theory of vortices in a perfect fluid worked out with the most final accuracy."

This time, then, Mr. Stallo has aimed at a real foundation of physics, but his attempt to destroy it by bringing it into collision with the "magnificent structure" of astronomy is a failure. Astronomy has no doctrine at variance with physics. It utilises an observed relation; but it does not theorise on the cause of this relation. Such theorising is for physics; and every step gained seems to show that physics is theorising in the line of truth.

(4) The last of the four propositions—that all energy is essentially kinetic—is a consequence of the last. If there be no such thing as action at a distance, then change of shape, of configuration, in systems of bodies is associated inevitably with movement of the circumambient medium. The kinetic energy which is not in the moving system (and which, therefore, on a one-sided view seems to have become potential) is really transferred as kinetic energy to the medium. The alternation between the kinetic and potential forms in the energy of an oscillating system is, fairly regarded, only an appearance. The energy is alternately in the system of

bodies and in the medium, but it is kinetic in both. In other words there is no energy other than what depends on motion. What seems transformation is only transference. This is most perfectly illustrated in the vortex-theory. A circular vortex-ring may be crimped into little stationary waves, and will oscillate indefinitely about its mean form. At the end of each swing its parts seem momentarily at rest; in common phrase the energy of its oscillation is for an instant entirely potential. But the eye which looks for the forces maintaining the oscillations will see that at that instant the flow of the fluid around the ring is altered from the mean. The altered flow means altered pressures on the ring; and these tend to restore its form again. But at the moment when the ring was still the energy of its motion was not latent in it in any form; it was in the fluid and was manifested in the altered flow of it. Mr. Stallo has altogether failed to see that this is a possible view. Against it he merely heaps up instances in which the phrase 'potential energy' is used by men of science. He then infers that each instance is a contradiction of the proposition that all energy is kinetic. The inference is entirely irrelevant. To say that energy has become potential is merely to say that it has disappeared from the arbitrarily isolated system we are choosing to consider. We have merely to take a wide enough view to see that it is still present and still kinetic. We may quite consistently, when speaking to instructed listeners, speak of it as potential. We do not contradict ourselves any more than when we speak of the sun as travelling across the sky. Mr. Stallo's long and laborious chapter proves nothing but his reading. His conclusion—that the history of the theory of energy is "that of a progressive abandonment of the mechanical proposition"—proves how greatly he has misread. Those who are now 'making history' in regard to the theory of energy are each and all inspired with the faith that this fundamental mechanical proposition is true.

The author claims that, having discussed the cardinal principles of the mechanical theory, he has shown "that they are severally denied by the sciences of chemistry, physics, and astronomy". We have met his claim by showing that his cardinal propositions are not essential, or that his presumed contradictions are nothing if not verbal. We shall not follow him in his examination of the chemical Atomic Theory and the Kinetic Theory of Gases. His criticisms of these are often shrewd even if they are not new. But he betrays an unfamiliarity with the subject-matter scarcely less striking than his familiarity with what has been written and speculated about it. If people always used words accurately and with the same meanings it might be safe to take the words as corresponding with things. But it is dangerous to deal in words exclusively, even when they are the words of approved men of science. Those who have dealt in the things that are faintly shadowed by the words have the clue to their meaning, and from

within can read into them much that they fail to express. Hence working men of science understand each other's language, even when it is imperfect, a thousand-fold more clearly than the clearest-headed of those who are hearers only. Mr. Stallo has been a diligent and painstaking hearer and reader. We are convinced he would never have written at least the first half of his book if even to a small extent he had also been a doer. His criticisms apply not to the concepts of physics in the truest sense, but, where they are good, to the verbal expression of them. And even then he is too often content with a semblance of refutation when a little further examination would have led him to an opposite conclusion. He has the further fault (we have noticed it before in American writers), of not distinguishing between first-rate authorities, whose dicta are worthy of the carefullest consideration, and third-rate or fourth-rate writers, whose opinions can scarcely be called science. In dealing with a disputed question a kind of balance of authorities is sometimes struck, and to an Englishman at least the principle of manhood suffrage is too crudely allowed to decide the issue. Scientific questions are of course not to be settled by authority, but in Europe it is often held that some teachers are better entitled than others to say what is accredited doctrine and what paradox. Mr. Stallo has sometimes failed to distinguish the two, and set down both alike to the account of "modern science".

Enough has been said to show that the book is worth reading, but with caution—and a grain of salt. On the more strictly metaphysical parts of it I do not venture an opinion.

DONALD MACALISTER.

Nature and Thought: An Introduction to a Natural Philosophy. By ST. GEORGE MIVART. London: Kegan Paul, 1882. Pp. 261.

Mr. Mivart presents us with a series of dialogues between F., a mild, easy and rather simple youth, who has played at scepticism and is now in a state of unstable equilibrium, ready for conversion, and M., his "guide, philosopher, and friend," who seeks to lead him into that outer court of the temple of Catholic Truth, Natural Theology or "Philosophy". This is sufficient indication of the pith and purpose of the book and, without saying anything about its literary setting, it may be allowed to pass on to an appreciation of the author's main positions, and his way of defending them. His essential theses are four:—(1) The possibility of absolute certainty; (2) A *known* world-in-itself, the postulate of science; (3) The possession of absolute, necessary and universal truths, which lifts the origin and nature of man above the plane of "Nature," and makes a supernatural anthropology possible; (4) The possibility of theology, theodicy, and

supernatural religion and morality. His method of philosophy is an amalgam of common-sense and psychology, making "use of all our means of information," and "justifying the spontaneous natural dictates of man's uncultured reason by philosophical analysis". A system of propositions—each self-evident, and all coherent—is true, and such a one is this "natural philosophy". The challenge may very well be accepted; and both his principles severally and their harmony be called in question.

(1) We attain "absolute certainty" by being furnished with "intellectual intuition," a faculty of positive and potent direct insight, and no "impotence" or process of reflection—*actus* not *actio*, an instantaneous glance and not an inquiry. "Whatever is evident is true" and absolutely certain, a doctrine identical with Descartes' appeal to clear ideas, although that is previously condemned on p. 19, and Descartes is included amongst those philosophers whose analyses of consciousness have been incomplete and one-sided. That is "evident" which is an object of "intellectual intuition," and such objects constitute "objective evidence," which by coinciding with "subjective evidence," or the feeling of assurance and certitude, give "absolute certainty". These objects, again, are a kind of occult qualities called "objective concepts," which inhere in the things themselves, and swing in meaning between Scholastic realism and Platonic idealism, so that it is difficult to say decidedly whether Mr. Mivart takes them to be *ante res*, *in rebus*, or *inter res*, or what else the *res* are themselves. This way of seeing percepts, concepts, and realities double, looks very like seeking the ground of the ground, the rationale of the irrational, and the reason of the faith that all reasoning presupposes. Surely the faculty and its objects are both pure assumptions, and quite gratuitous after the author has said, "self-conscious reflective thought is then our ultimate and absolute criterion," where he appears to accept Reflection as the critic, and ultimate inexpugnability on reflection as the criterion of truth; and yet he almost immediately afterwards rejects every kind of reflective test in favour of intuition, justifies the high value he attaches to the testimony of language and common-sense, because of the superior clearness and distinctness of direct thought (*i.e.*, intuition), of which he considers them products, and subjects Mr. Spencer's universal postulate to a special criticism, which takes the form of the sophism of the false infinite, thus, after Mr. Balfour:—A thing is true because we cannot conceive the opposite; but how do we know that this proposition is true? by the same warrant, because we cannot conceive the opposite; and so on *ad infinitum*. Unfortunately, it can be shown, by the same sophistical reflection back into an illusory infinite, that self-consciousness can never have begun to be, since we cannot know without knowing that we know, and so *ad infinitum*. But this is not serious criticism worthy of the conciliator of common-sense. Another way the author has of

meeting Mr. Spencer's test of inconceivability, is by affirming the conceivability of the unimaginable. "I cannot imagine my own annihilation, but I can conceive it!" he says, not observing that in conceiving it, "I" remain and am. Yet when it is said that "conception is not tied down to experience, though imagination is," one can well believe it, if one has already accepted the "objective concepts"; but it will be incredible, if one sees that concepts are only images in outline waiting to be filled in. Throughout this dialogue on certainty, it may be noted that "objective" is taken to mean "noumenal," objects are confounded with things-in-themselves, and such words as "being," "existence," and "things" are freely used, but left undefined, as if we all knew and were agreed on what they meant. By a curious argument, memory is made to witness to our knowledge of noumena or absolute certainties; for "it enables you and me to know events that once really happened, and to recollect objects separated by more than a quarter of a century's interval from our present consciousness. We thus know real existences, which are objective or external to us, but of which our senses can tell us nothing." But *did* they tell us nothing? And what are these "objects" and "events" in memory but representations of what was once presented in sense-perception? Memory has not carried us beyond the circle of phenomena.

(2) We are thus brought to the edge of the second affirmation. that we can have a certain knowledge of "an external world existing independently of ourselves such as physical science postulates". By this an unphenomenal world is meant, and the relativity of knowledge is denied, for we have absolute knowledge of the world as it absolutely is. The world is representative, but to represent means to "*make the thing present*," and so we have direct vision of the world-in-itself with all its absolute primary qualities, and even its secondary qualities, like "objective sound," and with an immediate assurance of its truth and being by intuition. What we perceive without or against our will gives us this world-in-itself; as if the presence or absence of the feeling of effort in the complex of a percept made it more or less than a phenomenon. For the most part, Berkeley is met with the mere counter-assertion of the noumenal existence of phenomena, as "unthinking substances, and things-in-themselves," but the author also uses against him the distinction between conception and imagination, where he says "I cannot imagine a thing existing unperceived by anybody, but I certainly can conceive it," and so we have "an apprehension of external objective conditions of real independent bodies," *unlike* the sensations and relations between sensations, on occasion of which we intuite them! Admitting that Berkeley is irrefutable, so far as *ordinary* experience goes, if the position of Locke and Kant is granted that our percepts are compounded of "our own ideas and sensations only," Mr. Mivart simply contents himself with denying that premiss,

and begs the question. But even allowing it, he thinks that phenomenalism is not so compatible with *scientific* experience and thought, for these require us to believe that "the numbers, shapes, solidities, and motions of bodies," and even their secondary qualities, "really exist objectively"—*i.e.*, absolutely and in them; and so science postulates unphenomenal phenomena, and there is no difficulty about it, for, even admitting Lewes's "greeting of the spirit," our intellect has power to subtract this subjective element, and concentrate its gaze on the pure noumenal *residuum*. It is not easy to see why Mr. Mivart sets his face against a mitigated idealism like Berkeley's or Ferrier's, which offers him the most plausible ground for postulating a Universal Consciousness, unless it is the fear of consequences and logical issues.

(3) The third position is carried by a *tour de force*. It is only necessary to posit an "innate power" and faculty of pure intellectual apprehension of absolutely necessary and universal truths, seen to be such by their own evidence. It is not that universality in experience gives the feeling of necessity, as when poor F. says of such invariables, "They certainly do strike me as true for all the times and places *I can think of*"; although Mr. Mivart admits that association and "custom" may be the divinely appointed occasion of our apprehending absolute truths. Causality or "influx" is one of these truths, known by spontaneous intellectual intuition; and this without any sense-mediation in the case of "the inflow of the influence of motives upon our will". "Goodness" is another, *sui generis*, absolute, self-justified, underived, and intuitively discerned. So too "oughtness" is "unanalysable," and "moral" means inexplicable. Pleasure, interest, happiness, and "moral sentiment" are at the most mere accessories or coincidents. Possessed of such absolute cognitions as these and their issue, language, man has his origin and nature secured against Darwinian and evolutionary assaults. Here Mr. Mivart is very positive about what animals can and cannot do (pp. 165-6), and about Darwinism, which is a "superstition" reposing neither on reason nor evidence, but on "ignorance of what reason is, and, above all, ignorance of the meaning of the word 'goodness'," and so Darwin's derivation of man and his speech and morals falls to pieces, chiefly because he could not define the undefinable. But, if possible, the Agnostic doctrine of relativity is more "extremely pernicious" and "foolish".

(4) We have now a supernatural anthropology *in ovo*, and are prepared for the last position; and it only remains, as a preliminary, to establish the soul. This is done by hypostasising the original synthetical unity of apperception, as soul, the substantial form or principle of individuation, in a way shown to be illegitimate by Kant a century ago (p. 185). It is an immanent principle, an immaterial entity that acts, directs, controls, unifies, organises (p. 189), and yet it is not "a numerically distinct something," is only the living body from a dynamical point of view, the sum of

its energies (p. 188), and apart from the body "an abstraction"! It is, in fact, a bundle of these and other contradictions. All living plants and animals *are* souls, and there is no *hiatus* except two, one between the unliving and life, the other between the highest merely animal life and man. Such things "we know most intimately," and it is enough to simply affirm them. The human soul is immortal, because "*in a sense*" out of space and time (p. 225), and transcends while it pervades the body, for (p. 227) intellect and will are not immersed in the body, and are without organ! All this appears as pure free play of the imagination, without a particle of real proof, but it is a postulate of the theodicy, which requires a future life of rewards and punishments (p. 229); and there is yet another proof of immortality, namely, the soul's "power of intervening as a free cause, and modifying the whole chain of physical causation by a quasi-supernatural act of volition". This doctrine of Free-will is also a proper propædeutic to the doctrine of miracle, prayer, providence, and revelation (p. 223); free-will being itself a kind of miracle, for "my free volition is a truly *uncaused* action which intervenes in the course of physical causation, and alters the whole future of the universe for all eternity". Mr. Mivart brings forward nothing new in defence of free-will, which he finds in the usual way, by confounding the sense of incompulsion we sometimes have with an intuition of absolute origination we never have, and thus getting "a new force entirely distinct from the force of the motives," and yet—strange to say—acting "*in conformity to* our perception of duty"! In building up his theology, Mr. Mivart proceeds as if the Transcendental Dialectic had never been written. The world may be eternal, but it may be taken as one well-ordered whole, and then requires a cause of harmony. He does not show how we can think the totality, and assumes without proof that cosmos is a *fact* and a *contingent fact*, whereas chaos may be equally a fact, and neither may be absolute, while both may be eternal and necessary correlatives. When he is thinking of the world as a machine, it requires a transcendent *deus ex machinâ*, but at other times he is driven on to think of an immanent and pervading *anima mundi* (p. 200). The proverb, *Nemo dat quod non habet*, provides the self-existent absolute cause with abundant attributes, and the process of clothing culminates in anthropomorphic impersonation; while in another place "de-anthropomorphisation" goes on till even "existence" cannot be predicated unambiguously (p. 206). The author is an optimist because he is a believer in God, and he is a believer in God because he is an optimist (pp. 208-9). By another *circulus*, the divine goodness proves the future life, which itself depends on the divine goodness (pp. 244, &c.) The theodicy advances by minimising pain and evil in a way that is ungenerous when we are not the sufferers, by making good come out of and depend on evil, a manufacture that fails where there is no future life for the creatures, and by many

appeals *ad ignorantiam*—to the possibly stubborn nature of things, "the range of objective contradiction" or essential absurdity possibly limiting omnipotence, the inscrutability of the divine purposes, the "vast scheme of infinite beneficence" past finding out, the possible existence of intrinsic or "objective beauty" where men find ugliness, and so forth. In fine, theology and theodicy are the offspring of desire—"a desire that all that is highest and best—ideal perfection—should really exist," and accordingly no one "could dare to be impartial, unless he would dare to be voluntarily and deliberately as impious as absurd".

J. Burns-Gibson.

Hamilton. By John Veitch, LL.D., Professor of Logic and Rhetoric in the University of Glasgow. ("Philosophical Classics for English Readers.") London and Edinburgh: Blackwood, 1882. Pp. 268.

One chapter (pp. 1-35) in this volume is devoted to biography: the remaining eleven are occupied with Hamilton's philosophy. The Psychological doctrines, the Nomology and the Ontology, are all fairly and, in the main, fully presented. But we miss the Logic. No small omission, everybody will allow: and we can only regret that "there was not space to do it justice".

The doctrines and teaching of Hamilton himself, we are not, of course, here called upon to discuss. We are simply concerned with our author's presentation of them, and with his amplifications, amendments and corrections. And, first of all, we observe that Prof. Veitch is thoroughly alive to certain of the weaknesses of the Hamiltonian philosophy, and that he does not refuse to expose a defect when he puts his finger on it. Thus, he frankly acknowledges Hamilton's inconsistency in maintaining that Consciousness is coextensive with Mind, while at the same time upholding the doctrine of Mental Latency. He sees also and admits that, in his theory of External Perception, Hamilton laid an unwarranted stress on one single source of objective knowledge —Locomotion. And if we ask, How does Hamilton's doctrine of the immediate knowledge of the Ego in Perception accord with his other doctrine that we have no immediate consciousness of self at all, but only reach it mediately? he is ready with the answer, "I confess there seems to me some very considerable ambiguity in the doctrine of Hamilton regarding our knowledge of the Ego . . . On this point of the mediate or inferential knowledge of the Ego, Hamilton cannot be said to be quite consistent." There are, also, points in the Ontology that he considers inadequately expressed or erroneously conceived. But there are points in Prof. Veitch's own psychology that we cannot regard as altogether satisfactory: one or two of which we may now allude to. Grant, for instance, that Hamilton was inconsistent in his

doctrines of consciousness and mental latency, there is surely another way of getting over the difficulty than by impugning the fact of subconsciousness. It seems more in harmony with the evidence, to admit the fact and to extend the meaning of "psychical" or "mental" so as to include it; and if there is such a thing as thoughts "simmering" in the mind, and if Memory means with Prof. Veitch, as it did with Hamilton, the Conservative or Retentive Faculty,—"the power of retaining knowledge in the mind, but out of consciousness,"—this becomes absolutely imperative. Again, exception is taken to Hamilton's classing Desire with Will; on the grounds that Desire is, in its origin, more properly allied to Feeling, and, in its result, "a tendency pointing to one definite issue,—the realisation of the object or aim represented". But, though it be indisputable that Desire in one aspect may be regarded as Feeling, it is no less evident that in another aspect it is one of the Active Principles of our nature —like appetite and instinct; and this last seems to give its distinguishing characteristic and to forbid our sundering it from Volition. At any rate, Prof. Veitch will carry few along with him when he proposes to erect it into a separate mental province, and to classify the phenomena of mind in the fourfold fashion— Knowledge, Feeling, Desire, Will. Once more, a word on the Perception problem. Undoubtedly, Hamilton exaggerated the power of Locomotion in supplying us with a knowledge of Body, and his doctrine of Natural Dualism ill consorts with the dictum of a mediate knowledge of self; but is there not at least one other flaw in his teaching equally worthy of notice and of comment? Why have we no *redding-up* (as Ferrier would say) of Hamilton's theory of the visual perception of distant objects? This, we had always thought, was a vital point in Hamiltonian Realism; and explanation is certainly required: all the more so as Bailey's exposure (and Bailey was himself a realist of the stanch type) has appeared to so many absolutely conclusive, and his arguments have not yet (so far as we know) been answered.

Next, as to the treatment of Mill. We hardly think that Prof. Veitch has made the most of this great adversary, even for his own purposes. Certain of his criticisms, indeed, are relevant enough and pointed enough; but others of them are little short of captious. There is scarcely argument in such phrases as "quibble," "simple caricature," "strained verbal interpretation," &c.; and one has reason to complain that Mill has been positively misrepresented in the matter of Knowledge and Belief. Without question, Hamilton's use of the word Belief is altogether objectionable, and, what is more, he himself vacillates in the employment of it. In ordinary philosophical usage, we are said to *believe* what we have not an immediate experience of,—we *believe* on evidence adduced or on trustworthy and satisfactory testimony (memory, accredited authority, &c.); we *believe* as the result of probable (contingent) or analogical reasoning. But we cannot

rightly be said to *believe* either in an object "which I perceive now and here—in this time and this space," or, speaking generally, in "the original data of reason". And no one need be surprised if this abusive application should react unfavourably on the doctrine to be conveyed. It is quite a mistake, however, to suppose that Mill was ignorant of the particular signification that Hamilton attached to Belief, or that he allowed himself to be carried away by a mere verbal ambiguity. A careful study of the short quotation from his *Examination* on p. 118 (to go no farther), and an impartial comparison of this passage with the longer one from Hamilton on the page immediately preceding, will, we presume, lead most readers to a different conclusion from Prof. Veitch's. At all events, it appears to us that Mill has here presented the Hamiltonian doctrine very fairly and succinctly, and that his criticisms have both relevance and force. Nor has strict justice been done to Mill on p. 160, where a close examination of the phraseology would show that there is nothing so very ludicrous in the idea of "a present knowledge of the object represented, as a condition of the representation"; and, on p. 232, a protest may be entered against the criticism founded on the wording of the first edition of the *Examination*, while the amendment of the fourth edition is relegated to a foot-note,—and that although the amendment goes far to meet the criticism of the text and deprive it of its edge.

A word on Hamilton's erudition. That this was very great, indeed vast, is beyond all question; and it is generally agreed that there have been few men in any age or in any country so well equipped for the task of writing a history of Philosophy as Hamilton. Indeed, the complaint is that he wasted his energies in editing Reid, when he might have been better and more profitably employed; and with just reason may our author speak of his "extraordinary research" and of his work as "wholly without a parallel in Britain". But we all know that Hamilton had a knack of turning his learning against an opponent in a way not altogether to be commended. The only refutation that he often found it convenient to give to an adversary was the proof that what he urged had been anticipated—that it was not new. As though the want of originality detracted from the strength of an argument! We had expected a gentle reference to this from a disciple so loyal, yet so discriminative, as Prof. Veitch.

William L. Davidson.

Linguistic Essays. By Carl Abel, Ph.D. London: Trübner, 1882. Pp. 265.

In his *Koptische Untersuchungen* Dr. Abel has long been known not only as one of Lepsius's most distinguished pupils, but as a prominent leader of the "Junggrammatische Schule". In the pre-

sent work he endeavours to show that a thorough-going study of language must be no mere formalism, but rather a philology in the sense of a comparative national conceptology. Instead of discussing grammatical questions according to parts of speech, Dr. Abel makes a systematic attempt to realise the psychological value of the lexicon and to connect grammar and dictionary by conceptual ties.

"If language is ever considered as an object of psychological study, and every language regarded as reflecting a complete and peculiar view of the world, a different method will have to be pursued in analysing its contents. Grammatical forms will have to be classed not only according to the part of speech in which they occur, but also in harmony with what they imply. Any one notion indicated by grammar, instead of being studied separately in each part of speech to which it ministers, will have to be traced through all the various forms embodying it, and confronted with the independent words of the language exhibiting the same idea. To make the parts of speech the only class-heads of grammatical study is to hide the thoughts of a people under the mere form of their words, and impede the investigation of the multitudinous concrete by the exclusive consideration of one, and this the most abstract, feature of speech."

Hitherto, students of language have, for the most part, been engaged in seeking and formulating the laws of phonetic changes, but a far more important study is that of the laws of conceptual evolution as manifested in the rise and fall both of word-meanings and grammatical forms. How are concepts generated and concatenated? How are impressions co-ordinated? These are the questions that interest the psychological student of human speech, and it is because Dr. Abel believes that the signification of words and forms reflects a nation's general view of mind and life, and carries on his researches upon the basis of national and international linguistic analysis, that we gladly recommend these thoughtful and attractive Essays to the readers of MIND. Students of English especially may be congratulated upon a contribution to their branch of knowledge which combines no ordinary amount of empirical tact with a degree of *Sprachgefühl* unusual even in the Germans themselves.

The first four essays deal with the psychology of the dictionary. In "Language as the Expression of National Modes of Thought" it is pointed out how, strictly speaking, translation from one language into another is not only difficult but well-nigh impossible. The German 'Freund' is not the French 'ami,' nor is 'decision' equivalent to 'Entschluss'. On going into a strange country and adopting another language we cannot precisely render our old ideas by the new words, nor can we help the new words unconsciously changing our opinions. The English dictionary is singularly rich in words denoting various shades of colour, whereas the German is remarkably poor. "Tints which in German only he who has an exceptional eye for colour can distinguish, and then has to describe by paraphrase out of his own head, are in England recognised as of course, and in con-

sequence named with special words." It is, we think, generally admitted that accurate observation of natural phenomena is more prevalent in England than in Germany.

Employing the method of concomitant variations, Abel seeks to show how changes in idea and feeling uniformly accompany the successive stages of linguistic progress. The Hebrew, Latin, Russian, and English words for 'love' are analysed so as to display each nation's concept as a separate system of feelings and thoughts, to be compared with the concepts of other nations. Synonyms are carefully discriminated by this able investigator and the English verbs of 'command' are classified according as the purpose is defined or not, binding or otherwise, &c. The question of *desynonymisation* is engaging the attention of English philologists just now, more especially in connexion with the Philological Society's Dictionary. If "il faut savoir la grammaire et connaître les synonymes lorsqu'on veut être roi de France," it is also necessary to know the conceptual interdependence of grammar and lexicon in order to become master of a language.

In the essays on "Philological Methods," and "The Connexion between Dictionary and Grammar," we see in what way Dr. Abel is endeavouring to establish Comparative Lexicography as a sister-science to Comparative Grammar.

"The psychological method is not content to take etymological and syntactical forms as starting-points for linguistic research. Only if every notion in the lexicon is likewise made the point of issue for special inquiry is language adequately apprehended. If the notion is abstract enough to admit of also being expressed by grammar, etymology and syntax will be needed to throw light upon it, as well as semasiology. If it is concrete, semasiology will have to be chiefly consulted; but etymology and syntax will have to be called in likewise to account for the form of the word; and illustrate its meaning by derivation and use. . . . To successfully carry out the psychological treatment of the lexicon we shall have to confront whole groups of words, in contra-distinction to the old synonymical method, which compares only a few nearly allied words. For the various aspects of a notion to be collectively represented in the array, a sufficient number of illustrative shades must be taken. . . . By interpreting the German terms of causality, 'Grund' and 'Ursache,' very little is known of the Teuton view of these fundamental notions. To really understand them it is necessary, besides investigating many other substantives, to consider the particles 'weil,' 'warum,' 'wodurch,' 'wieso'; the prepositions 'durch,' 'mit,' 'von'; the verbs 'machen,' 'schaffen,' 'wirken'; the subjunctive as implying cause; the Gothic and Old High German instrumental case and much else that is relevant."

This treatment of the lexicon seems to us imperfect owing to the non-recognition of the principle of antithesis. If we want to know what the English understand by 'forgiveness' it is not enough to say 'pardon,' 'condonation,' 'grace,' 'remission,' 'absolution,' 'amnesty,' 'oblivion,' 'indulgence,' 'reprieve,' 'conciliatory,' 'unresented,' &c.: we must take into account their opposites—'revenge,' 'rancour,' 'ruthlessness,' 'vindictiveness,'

'implacability,' 'avenger,' 'Nemesis,' 'Eumenides,' &c. Again, in many cases, as Roget has well shown, two ideas which are mutually opposed, admit of an intermediate or neutral idea, equidistant from both, and these must be known before the concept is fully gauged. For instance:—'identity,' 'difference,' 'contrariety'; 'beginning,' 'middle,' 'end'; 'past,' 'present,' 'future'. Sometimes the intermediate word is simply the negative to each of two opposite positions:—'convexity,' 'flatness,' 'concavity'; 'desire,' 'indifference,' 'aversion'; or, the standard with which each of the extremes is compared, as in 'insufficiency,' 'sufficiency,' 'redundance'.[1]

The essays on "Coptic Intensification" and "The Origin of Language" are based upon what Dr. Abel considers the irrefragable evidence adduced in his *Koptische Untersuchungen*, which, he thinks, will permanently influence our views of primeval language. In the *Cratylus*, Plato would have us understand by μίμημα τῆς φωνῆς not merely onomatopœia, but a consistent sound-symbolism, which attributes conceptual significance even to individual letters. And the Coptic grammarian of to-day, "though he has to content himself with determining a few vowels, saves the theory by establishing it on a historical basis". But it is a mistake to style the ninth essay "The Origin of Language"; it should rather have been called "Characteristics of Primitive Speech". From a psychological point of view it is by far the most important of Dr. Abel's studies, but we cannot do more here than point out the salient features of the question.[2]

On first looking into an Egyptian dictionary we are struck by the fact that almost every sound may have any meaning (Homonymy) and, conversely, nearly every meaning may be expressed by any sound (Synonymy). 'Ab,' for instance, means to dance, heart, calf, wall, to proceed, demand, left hand, figure; whilst 'to cut' is expressed by more than thirty different sounds. And this is not all. We find in Egyptian three forms of linguistic antithesis, that of *sound*, of *sense*, and of *sound and sense*. *E.g.*, *(a)* Inversion of sound: *teb-bet* fig; *(b)* Inversion of sense: *ken* strong-weak; *(c)* Inversion of sound and sense: *so's* becoming, *'ses* unbecoming.

How are we to account for this? We feel at once that this is a class of linguistic phenomena which can only be explained by the application of the psychological method. At first sight, such a state of things would seem to involve unintelligibility.

The occurrence in so many languages, notably in Arabic, of

[1] [*Cf.*, the Article on "The Logic of Dictionary-defining," by Rev. W. L. Davidson, in MIND XXII., 212-31. ED.]

[2] The present writer hopes to treat the subject at length in an early number of the *Zeitschrift für Völkerpsychologie und Sprachwissenschaft*, when he will propose a classification of primitive linguistic phenomena upon a psychological basis.

words with polar meanings cannot be explained by fortuitous Homonymy, but must result from the principle of universal Relativity. Thinking being a synthesis of thesis and antithesis in rapid alternation, we should not be surprised to find polarity in the expression characteristic of early mental life. As Prof. Bain (*Logic*, i. 54) well says :—

"The essential Relativity of all knowledge, thought, or consciousness, cannot but show itself in language. If everything that we can know is viewed as a transition from something else, every experience must have two sides ; and either every name must have a double meaning, or else for every meaning there must be two names. We cannot have the conception 'light,' except as passing out of the 'dark'; we are made conscious in a particular way by passing from light to dark, and from dark to light. The name 'light' has no meaning without what is implied in the name 'dark'. We distinguish the two opposite transitions, light to dark, and dark to light, and this distinction is the only difference of meaning in the two terms : 'light' is emergence from dark ; 'dark' is emergence from light. Now, the doubleness of transition is likely to occasion double names being given all through the universe of things ; languages should be made up, not of individual names, but couples of names."

It must not be forgotten that, in Egyptian, every word is first written by letter, and then explained by a supplementary picture, pointing out the order of conceptions to which the word belongs. When *ken* is used for 'strong,' we find behind the alphabetically written word a picture significant of strength ; in the same way we may always know when the word stands for 'weak' from the accompanying illustration indicative of weakness. And what the picture was to the written word, gesture and expression-reading were to the spoken word. If, as is most probable, the root, or perceptual reflex, was repetition of a syllable, then *ken-ken* would be 'strength-weakness,' and *ken* alone would be 'strong-weak'. A differentiation would be *Ruhe-hurry*, &c., metathesis of sound for inversion of meaning.

In conclusion, we would express the hope that Dr. Abel may find many fellow-workers in this new and promising field of research.

H. M. Baynes.

Geschichte der Ethik in der neuern Philosophie. Von Friedrich Jodl, Privatdocent der Philosophie an der Universität zu München. I. Band. Bis zum Ende des 18. Jahrhunderts ; mit einer Einleitung über die antike und christliche Ethik. Stuttgart : Cotta, 1882. Pp. xii., 446.

Herr Jodl's work, of which the first volume is now published (*cf.* Mind XXVIII., 606), promises to be a valuable contribution to the history of ethics, and a valuable aid to ethical study. To a large extent its value is due to its definite and restricted aim. Much that usually goes under the name of ethics finds no place in

it. The detailed treatment of the virtues and the application of moral principles to conduct, the consideration of which forms so large a part both of ancient and modern ethical works, are here omitted; so that the author has had grave doubt whether his work "has a right to be called a history of ethics" at all. But the book really gains by this omission; for an opportunity is thus given of bringing into clearer light the more fundamental questions of ethics—the question as to the nature of morality, and that regarding its origin. To trace the way in which these two questions have been dealt with in modern philosophy is Herr Jodl's aim. His book thus occupies ground distinct from that covered by such works as those of I. H. Fichte and Vorländer. Leaving to these writers to trace in detail the way in which ethical questions have been dealt with by different moralists, Herr Jodl attempts to exhibit the progress of philosophical views regarding the foundation of ethics and the origin of moral ideas.

The initial difficulty that attaches to any history of ethics is of course not overcome by this method. That difficulty arises from the fact that an author's ethical doctrines naturally depend upon his metaphysical or at least theoretical standpoint. Hence the principles of ethics cannot be properly explained apart from theoretical philosophy; so that a historian of ethics, who attempts to treat his subject apart from metaphysics, is in danger of leaving its fundamental principles in obscurity, while, if he attempts to make them clear, his tendency may be to expand his work into a history of philosophy in general. It would be too much to say that Herr Jodl has hit the happy mean between the two extreme courses—entered sufficiently upon theoretical philosophy to make his principles clear, without ever discussing it for its own sake. His tendency indeed is to treat ethical as too much independent of general philosophy. He even contends expressly in one place (pp. 356-7) for the complete independence of ethics: "a science of ethical principles is possible (he says) independently of all metaphysical and theological constructions". And to a certain extent this is no doubt true. So far as theology is concerned, when it is connected with ethics at all in modern thought, it is usually by being made dependent on morality and not conversely. And there are undoubtedly developments of metaphysics which have no essential and direct bearing on ethical questions. Herr Jodl however means more than this; the ethical agreement of Leibniz and Spinoza being brought forward to prove the independence of ethical principles on an author's metaphysical or speculative view of things. But with regard to this, it is evident, in the first place, that the same general doctrine of ethics may be quite correctly deduced from speculative principles which yet differ from one another in metaphysically important respects, just as the same physical effect may equally well result from either of two or more possible causes; while, in the second place, were this not the case, ethical harmony but metaphysical discrepancy between

the principles of Leibniz and Spinoza might only prove the inconsequence of one of these philosophers, not the disconnexion of ethics and metaphysics. An answer to the inquiry into what is moral, *i.e.*, into what is good or best in human action, implies a view of human nature both rational and sensitive and of the ends it is fitted to subserve. We cannot determine the end without first of all studying the organism of which it is the end; and the study of man implies the study of reason, man's distinctive characteristic. Hence the inseparable connexion of metaphysics as the theory of knowledge with ethics as the theory of action, and the dependence of the latter on the former.

More than any other historical development, perhaps, English ethics is independent of expressed metaphysical views, and to it nearly one half of the present volume is devoted. The points in dispute among the English moralists of the 17th and 18th centuries were expressly points of moral philosophy; and we seem able to trace the succession of moralists almost without reference to their speculative opinions.

After introductory chapters on ancient and medieval ethics and on the beginnings of independent ethical inquiry in modern philosophy, Herr Jodl proceeds to trace the development of English and Scotch ethics from Hobbes to Adam Smith, the subsequent and concluding chapters of the volume being devoted to the ethics of the Cartesian school in France and of the French *illuminati*, and to the two developments of Cartesianism, Spinoza and Leibniz.

The treatment of the English moralists is in many respects the most interesting part of the volume. Till recent years some of the most characteristic systems of English ethics had been almost unknown in Germany. Butler especially was treated there with even greater neglect than was for long Shaftesbury's lot among ourselves. Even in I. H. Fichte's work, the former receives no mention at all, and in Vorländer he is dismissed with three pages to Bolingbroke's fifteen. Herr Jodl shows more sense of proportion by omitting the latter altogether and restoring the former to his rightful place as, along with Shaftesbury and Hume, the greatest of English moralists. By his clear and judicious account of this whole period, Herr Jodl does much to supplement the work begun by Giżycki's excellent monographs. He describes the leading features of the various ethical theories and controversies, and shows how the inquiry into the foundation of morality gradually gave place to that into the origin of moral ideas and judgments, till in Adam Smith—who, with finer analysis than any of his predecessors, discussed the psychological process by which ethical judgments arise—the question as to the objective basis of morality was altogether avoided (p. 250). But, just on this account, Smith's fine analysis of the moral feelings leaves him without any answer to Herr Jodl's first question—What is the moral good? For he shuns the inquiry into the moral

standard in accordance with which his ideal "disinterested spectator" forms his moral judgments.

On the whole Herr Jodl is perhaps not quite free from the leaning usually attributed to German writers towards a one-sidedly empirical interpretation of English thought. And this leaning is hardly justified by the interesting contrast it enables him to draw between English empiricism and the rationalistic movement as typified in Spinoza. Thus in discussing Shaftesbury, there is a tendency to minimise the rational element in his system. His "moral sense" is interpreted throughout as merely sensitive; and this has certainly the advantage of giving him a consistent theory. But at the same time it takes away from the force of his argument against Hobbes in favour of disinterested affections, and is even opposed to some of his own utterances. "Shaftesbury speaks indeed in various passages," Herr Jodl allows (p. 172), "of the reason in opposition to the imaginations and fancies of men, of the necessity of keeping them in restraint, and of man being more rational as this is more strictly done." But this "reason," according to our author, "is merely the sum of a man's reflex affections, the sum of the previous expressions of his 'moral sense'." Shaftesbury, however, goes further than this; for it is only through the rationality of men that the reflex affections forming the "moral sense" are possible, and they are distinctly spoken of as "rational" (*Inquiry*, I. ii. 4). To say, as Herr Jodl does, that according to Shaftesbury "the ethical does not arise from reason, but from a natural feeling, an inner impression, and is therefore not 'rational' but 'sensational,'" is to make his doctrine consistent at the expense of calling "not 'rational' but 'sensational,'" what Shaftesbury himself calls not "sensitive" but "rational".

With regard to the standpoint from which Herr Jodl looks on the general progress and tendency of ethical systems, it seems better to delay criticism till the completion of his work has fully explained its method and point of view. At present, this first volume may be recommended as a clear and suggestive treatment of the period it covers.

W. R. Sorley.

Ueber das Wesen und die Bedeutung der menschlichen Freiheit und deren moderne Widersacher. Von Hugo Sommer, Amtsrichter in Blankenburg am Harz. Berlin: Reimer, 1882. Pp. 100.

The doctrines set forth in this volume are derived from Lotze, who is regarded by the author as having in the history of modern philosophy a relation to Kant which is like the relation of Newton to Kepler in the history of astronomy. Lotze has proved that all knowledge must necessarily be, as Kant showed that it actually is, subjective. But all experiences

are events, and not, as Kant supposed, "expressions of a changeless inactive existence" (p. 10). Every experienced change is a change of the *whole* being. In the decisions of the will, therefore, we may study the whole nature of man. "The specific character of a decision of the will consists in the free choice among several motives offering themselves at the same time to consciousness" (p. 12). By developing all that is implied in the fact of freedom, we find that our life is bound up with all other changes that take place, with the whole process of change in the universe; that the "world-process" has a single end which is a good of absolute value; and that the specific nature of our existence consists in this—that it has an end which is our highest good, and which is of absolute value because in working towards it we are promoting that good which is the end of the "world-process".

It will be evident from this sketch that the author discusses not merely the question of the freedom of the will, but all the principal questions of philosophy. The object of his able exposition is indeed to show that a system of philosophy may be constructed by "harmonising with one another and with the rest of our knowledge" the results of an investigation of "the fact of freedom" (p. 17). The chapter containing the fundamental ideas of this system (pt. i., ch. 2) is preceded by a chapter in which the general conception of freedom is fixed.

Freedom "in its positive sense" is the capability of self-determination according to internal motives, and not a "causeless self-determination". The practical needs of life did not supply any occasion for the formation of this conception, but they caused "a negative conception of freedom" to be formed. Freedom in the negative sense is the capability of holding ourselves free from motives that are contrary to our true nature, that is, to our nature as moral beings. Since men are very often influenced by motives that are not in accordance with their true nature, freedom has come to mean, by an inadvertent extension of the negative conception of it, freedom from all motives whatever, and its positive sense has been forgotten. An entirely false notion of freedom has thus formed itself,—that of a "causeless self-determination" which, as immediate experience proves to us, is impossible. But this is not the true idea of freedom; determination according to motives, instead of being contrary to the freedom of the will, is an essential condition of it.

By observation of what takes place in ourselves, we may discover all that is implied in the fact of freedom. Every internal experience is pre-eminently one of feeling, thought, or will. But no experience consists simply in one of these things; all three elements—feeling, thought, will (Fühlen, Vorstellen, Wollen)—are present to a certain extent in every experience. When we will anything, for example, there is always present in more or less intensity the thought of what we ought to do, and the feeling that there is something which we ought to do. But

here, as in all experiences, feeling is the central element. Ideas of what it is that we ought to do have changed in the course of history, but the feeling that there is something which we ought to do has always been present. It is therefore in the feeling of moral obligation that we discover our true nature. But that which we ought to do is felt by us to have an absolute, not a merely relative value. Now there cannot be anything of *absolute* value unless everything that happens in the universe is directed towards a single end; and that only can be of absolute value which either itself makes part of this end or has for its specific character the tendency to the realisation of it. Thus we are led to the teleological view that has been described.

But this view requires further development before it can become a philosophy. As a preliminary to this, there is a discussion of the questions "In what does the truth of our knowledge consist?" and "What is its criterion?" (Pt. i., ch. 3.) It is concluded that truth does not consist in any kind of correspondence between our thoughts and the things outside us, but in a character that belongs to our mode of putting together our internal experiences. Our thoughts are true when their nature as internal events is understood, when they are placed in logical relations to the rest of experience. The criterion of truth is the feeling of the universality and necessity of ultimate axioms.

The problem that remains is, to find a centre for the positions that have been laid down. This centre is found to be the conception of the Absolute (das absolute Weltwesen)—a conception which can only be satisfied by the idea of "a living personality". (Pt. i., ch. 4.)

Immediate experience, according to the author, is the source of all our knowledge. But all experience is referred to ourselves as conscious beings. To exist is to be conscious of existing. If, then, there is a single highest being, which is the ground of all reality, this being must be conscious. By looking at experience more closely we shall obtain a clear view of the relations of the absolute being to individual beings and of these to one another.

Internal events for the most part are not spontaneous. They must therefore be caused by other beings. The chief problem of philosophy since Descartes has been to make this "reciprocal action of beings" conceivable. Lotze was the first to solve the problem. His solution enables us to infer from the fact of reciprocal action that only a single conscious being can be the real ground of everything that exists; that the reality of all individual beings in the universe can only consist in modes of the self-consciousness of this one being. For Lotze's solution of the problem is this:—that any change of state in any particular being is at the same time an agitation (Bewegung) of the substance that forms the ground of the existence of all particular beings, an agitation which, since it reverberates more or less strongly (schwächer oder stärker wiederklingt) in all other beings in the

universe, may appear as a corresponding change of state in any one of them. And this explanation is meaningless unless we suppose that the "Weltsubstanz," the ground of all reality, is a conscious being.

The idea at which we have arrived is in its present form too abstract. But we have seen that the process of change in the universe considered as a whole has an end of absolute value. Now an end of absolute value can only exist for a personal being. We must therefore add the idea of personality to the idea we have already reached. It is true that we are ourselves persons, and that we are limited beings; but personality is not in itself a limitation. And the conception of a perfect personality, when life has been given to it by means of the religious sense, no longer remains an empty form.

In the Second Part of his book Herr Sommer discusses the chief objections to the doctrine of free-will. He maintains that the objection that freedom is inconsistent with the law of causation disappears when for "causeless self-determination" is substituted "the true *positive* conception of freedom, the capability of determining oneself to an act of will according to internal motives" (ch. 2). Since our will itself and our whole nature belong to the universal order of things, freedom cannot be a contradiction of this order (ch. 4). Kant's doctrine of freedom is discussed in this division of the book, and his position in the history of philosophy is reviewed. But most space is taken up by an examination (1) of Modern Materialism, (2) of the philosophical views of Schopenhauer and Von Hartmann.

The Kantian criticism led to the theory that reality is to be found in subjective experience, but Kant himself was prevented from completely developing this view by his separation of phenomena from things-in-themselves, and by his position that the thing-in-itself is unknowable. His doctrine of freedom, in the form in which he has expressed it, is contradictory. But Kant's true view of freedom is outside the contradictions of his system. It is to be found in his definition of "practical freedom" as "independence of the will on everything but the moral law alone". This doctrine of practical freedom remained defective only because Kant did not formulate his moral principle in a perfect manner. If he had not neglected immediate experience he would have seen that in the highest sense happiness and morality are correlates. But he described correctly the nature of moral freedom; and one of the causes to which we may ascribe the appearance of exaggeration in the principle of the categorical imperative is a justifiable opposition to the "rationalistic eudæmonism" of the century.

In the chapters on "The Objections of Materialism" and on the philosophy of Schopenhauer and Hartmann, Herr Sommer's method is to criticise the leading principles of each system with a view to showing that the fact of freedom and its significance

cannot be rightly understood by those who adopt these principles. He analyses successively the conceptions of matter, force, space, time and law in order to prove that materialism has no philosophical coherence; that it "is only a theory of the appearances of reality in the world of representations, not a metaphysic of the reality itself" (p. 66). The materialist has no place in his system for freedom, because it is not part of the mechanism of the world of appearances. Those characteristics of modern life to which materialism owes its popularity—estrangement from ideals and the desire for simple explanations of things—have determined the form of the philosophical systems of Schopenhauer and Von Hartmann. The philosophy of Schopenhauer is founded on his doctrine of will. If, therefore, we see reason for rejecting this doctrine, we must reject his philosophy as a whole. Now the will, as we know it in experience, has definite characters, which are inconsistent with the conception of will as the thing-in-itself, and also with that which Schopenhauer imagined as the content of his conception of "will". Besides this, the actually perceived world of phenomena cannot be explained from Schopenhauer's point of view. Through separating phenomena from things-in-themselves he is led to regard every act of the will as determined and at the same time absolutely free. It is a merit of Hartmann to have rejected Schopenhauer's conception of a causeless freedom. He has understood the nature of freedom on the formal side; but his view of it is defective because he has not understood what is the essential character of man: the motives he takes into account are too few and too simple; for the will as we know it in experience is conscious, and is characterised by the (more or less intense) feeling of moral responsibility which always accompanies it.

The philosophical theory developed by Herr Sommer is, as he says himself, constructed "on an ethical basis". The defects of this mode of philosophising become most apparent in the last chapters of the volume. In the criticism of materialism, for example, the materialistic view of the world is condemned not simply on the ground of its bad metaphysics, but also because it does not supply any test of the moral worth of that which exists. And in the chapter on the philosophy of Schopenhauer and Von Hartmann it is contended that these philosophers have no right to apply the term "pessimism" to their "nihilistic" view of things, on the ground that their theoretical philosophy does not admit the conception of a better and a worse (p. 76, note); though it seems clear that this term refers only to their view of things in relation to the happiness of mankind. It is true, as Herr Sommer remarks in his preface, that all theories of the world are necessarily from the human point of view. But that the human point of view is not exclusively the ethical point of view may be shown by considering again the classification of experiences into those of feeling, thought,

and will. Although (as has been said) each of these three kinds of experience has an element of the two others, and although feeling is always the central element, yet the selection of a decision of the will as the primary experience from which a philosophy is to be thought out seems a little arbitrary, when we consider that the central feeling may not be identical in the three cases; and further reflection shows that it is really one of these other kinds of experience that ought to have been selected. For philosophical contemplation is distinctly an *intellectual* state of mind. Now the central emotion present in those kinds of experience that are pre-eminently intellectual is not ethical in its character. It is of its own kind, just as much as the ethical emotion; it is sometimes called 'curiosity,' sometimes 'the love of truth for its own sake'. This is the emotion in which philosophy has its origin; the desire to find moral meanings in things is merely a perverting influence.

The influence of the ethical point of view is, however, not perceptible in all parts of Herr Sommer's book. The doctrine, for example, that reality is to be found in subjective experience, is beyond the influence of ethical considerations. But why should the term "thing-in-itself" be entirely rejected in the statement of the last results of metaphysics, as it is by Herr Sommer and by other writers who accept this doctrine? According to the view they take, there is a sense in which the external world, when it is distinguished from that which is fundamental in subjective experience, is an illusion. Probably they would say that they prefer to express this distinction by some other term because the term "thing-in-itself" has been regarded as the name of something "unknowable". But this is an accident, not an essential part of the conception of things-in-themselves. And if, by bringing the doctrine of "the subjectivity of knowledge" into relation with Kant's application of the term "thing-in-itself" to a reality outside the individual mind, we can arrive at a consistent metaphysical theory, this, on the other hand, is an argument for retaining the term.

Herr Sommer's conclusions as to the existence of an absolute being and as to the attributes of this being, could not be drawn from the doctrine of the subjectivity of knowledge without the help of an assumption with regard to the *form* of all experience. This assumption is that analysis cannot resolve self-consciousness into anything simpler. Now if such an expression can be found for the form of experience that self-consciousness is seen to be a special manifestation of it and not its universal character, there can be no philosophical proof of the existence of the Absolute otherwise than as the conception of an ideal limit of the development of the human mind.

The doctrine of free-will, as it is understood by Herr Sommer, is not indeterminism. The only defect in his treatment of the will is the tendency to take it as an ultimate fact; and this would

not be of much importance if his account of it were regarded as a foundation for ethics rather than for philosophy generally. But his treatment of Schopenhauer's doctrine of will is inadequate. He shows conclusively that Schopenhauer's "will" is not the will as we know it. But he passes over the question whether "will" in Schopenhauer's philosophy may not be an expression for a primitive element in mind which is disclosed by analysis.

The explanation of Herr Sommer's use of the term "freedom" may be found in the first paragraph of his Introduction. He speaks there of freedom as "the specific expression of the true nature of man," and says that the need of free development has grown in all nations in proportion as their civilisation has become higher. Thus it is evident that he means by freedom first of all what is ordinarily meant by it, that is, freedom from external constraint. But he adds to this the idea of something positive, of that "spontaneity" which it will always be necessary to distinguish in some way from merely mechanical action. Further, in order that we may be "practically free," this spontaneity must manifest itself under a specifically human form; that is, its mode of manifestation must be determined by "an inner rule," the moral law. But why should this freedom be ascribed to the will? This is explained when we consider that spontaneity may manifest itself in action of some kind, and that conscious will is always present in action of the kind that is specifically human. Thus, when we are speaking of action, freedom, explained in this way, might be called "freedom of the will". But after all it does not seem desirable to make use of the term even in this sense. For if we grant that associations with indeterminism might be got rid of, the objection still remains that to identify human freedom with free-will in any sense would be to take a restricted view of the nature of freedom; seeing that "spontaneity," in a specifically human form, manifests itself in art and in thought just as much as in action.

T. Whittaker.

VIII.—NEW BOOKS.

[*These Notes do not exclude Critical Notices later on.*]

Evenings with the Skeptics, or Free Discussions on Free Thinkers. By John Owen, Rector of East Anstey. 2 vols. London: Longmans, 1881. Pp. 464, 516.

By an extremely liberal construction of what Scepticism is and includes, Mr. Owen has bound together, with a connective tissue of conversations after the manner of *Friends in Council*, a series of biographical studies of men who had very little else in common than a more or less persistent love of thinking for themselves, and has succeeded in presenting us with the first instalment of a very interesting if somewhat miscellaneous book, which in several respects at least justifies his expectation of filling up a gap in the history of philosophy in English literature. His wide definition of Scepticism when spelt with a "k," as sustained search with as much suspense as is needful, allows him to select the materials of his history from the promiscuous mass of inquiring minds who have sought truth in all times by question, analysis, criticism and circumspection, without regard to whether they have remained in doubt, seeking and freethinking to the end, or have finally found truth and rest by alien ways like feeling, intuition, faith, acquiescence in authority, or the free play of imagination. Thus it comes that Parmenides, Democritus, and even Socrates and Plato are numbered with Pyrrho and Sextus Empiricus, and other thorough-paced Greek Sceptics; that the sketch of Hebrew and Hindu Scepticism comprises the drama of Job with its *dénouement* of miracle, Ecclesiastes closing with a categorical imperative, the idealism of Kapila, Vedantist mysticism, and Buddhist dogmatic nihilism; and that, in the 2nd Vol. on Christian Scepticism, Augustine, Erigena, and Aquinas are reckoned typical doubters as well as Abelard and Occam. It is difficult to understand on what ground Mr. Owen has left any thinker—say, Aristotle or Duns Scotus—out of his list. At the most it can only have been with him a question of degree, and there seems no reason why we should not expect to find Kant and Hume, Hamilton and Mill, and with them all the moderns, in future volumes, as we are already promised not only Montaigne but Giordano Bruno. There might be much gained by a presentation of the whole history of philosophy with its sceptical side uppermost, and Mr. Owen's is an excellent popular essay in that direction, which is specially successful in demonstrating the corrosive and unsettling tendencies of the activity of Schoolmen, like Aquinas, who have been in general accounted dogmatic—

tendencies which, accumulating and finding a focus in Occam, constituted a leading factor of the Renascence and Reformation. These studies do not profess to have been drawn from original sources, but while making use of the many monographs and histories extant, like Prantl's, Rousselot's, Hauréau's, and Stöckl's, it is evident, so far as I have been able to ascertain, that the author has in many cases and on most material points sought to verify their statements. That the paper on Occam is an understatement of his utter scepticism, will be apparent to any one who looks through the *Quodlibeta* and *Centilogium*, where Occam criticises the whole ecclesiastical dogmatic system in detail, taking it to pieces and crunching it up bit by bit, often with rough Rabelaisian humour, and always with Voltairean zest, and with the blunt outspokenness of an Englishman. And it is scarcely possible to take the mysticism, in which he finds a refuge from the charge of heresy, so seriously as Mr. Owen appears to do. When Occam tells us that what we cannot know and believe by reason, we may know and believe, or believe without knowing, by grace of infused faith—a gratuitous and arbitrary gift, he certainly places himself within the pale of the Church again *per saltum* and by magic; but the unedifying performance is more like a supple feat of ironical mystification than a sincere and cordial submission to the supernatural, and as a covert attack is even more injurious than the open one. By the dramatic setting of his work, Mr. Owen has undoubtedly succeeded in investing philosophical subjects "with a human, homely, and familiar interest". [J. B.-G.].

The Greek Philosophers. By Alfred William Benn. 2 vols. London: Kegan Paul & Trench, 1882. Pp. xxxii., 402; xii., 430.

The author, who is known to the readers of Mind both otherwise and by his articles on "The Relation of Greek Philosophy to Modern Thought" (Nos. XXV., XXVI.) incorporated in the present volume, has had as his object "to exhibit the principal ideas of Greek philosophy in the closest possible connexion with the characters of their authors, with each other, with their development in modern speculation, with the parallel tendencies of literature and art, with the history of religion, of physical science, and of civilisation as a whole". The chapters as far as "Epicurus and Lucretius" have already appeared in the *Westminster Review*. Not before published are three chapters on "The Sceptics and Eclectics," "The Religious Revival," "The Spiritualism of Plotinus" (ii., pp. 120-362). Critical Notice will follow.

The Origin of Ideas. By Antonio Rosmini Serbati. Translated from the Fifth Italian Edition of the *Nuovo Saggio sull' Origine delle Idee*. Vol. I. London: Kegan Paul & Trench, 1883. Pp. lii., 382.

Rosmini, first introduced in writing of his own to English readers by Mr. Davidson (See MIND XXVI., 317 and XXVII., 398), is now to be made farther known in a translation of the earliest of his more important works. The present volume (to be followed by two others) contains the whole of the examination of previous theories of the Origin of Ideas which Rosmini's method required him to make before producing his own theory. He divides them into two classes: (1) Theories which err by Defect, *i.e.*, by not assigning to Ideas an adequate cause (Locke's, Condillac's, Reid's, Stewart's—the last, especially, very exhaustively discussed); (2) Theories which err by Excess, *i.e.*, by assigning to Ideas a greater cause than is necessary (Plato's and Aristotle's, Leibniz', Kant's—the last, again, at greatest length). The unnamed Translators have substituted an expository preface of their own (pp. vii.-xli) for Rosmini's, written as that was "with special reference to the Catholic public in Italy and to the condition of philosophical controversies at the time the *Nuovo Saggio* was first published" (1830).

Hegel. By EDWARD CAIRD, LL.D., Professor of Moral Philosophy, University of Glasgow. Edinburgh and London: Blackwood, 1882. Pp. 224.

None of the contributors to the series of "Philosophical Classics for English Readers" had a more difficult task set him than Prof. Caird, and no one has produced a work that, upon a first inspection, more judiciously and successfully blends philosophical exposition with biographical narration. The attempt to set forth, in so short compass, the main ideas and inner meaning of Hegel's thought deserves special examination, which will follow later on.

The Causation of Sleep. By JAMES CAPPIE, M.D. Second Edition, Re-written. Edinburgh: Thin, 1882. Pp. 207.

This work re-enforces a thesis which the author originally maintained as far back as 1854. The argument is mainly physiological, but is also intelligently supported from the psychological side. It is thus summarised at p. 111:—

"In the causation of sleep we have not one or two but a combination and succession of conditions inseparably linked together. The first change is a modified movement in the molecules of the brain tissue; the last is compression of the whole organ. From lessened activity of the molecules spring a less active state of the capillary circulation and diminished stress through the cranial cavity. Next, we have a change in the balance of the circulation, in producing which the weight of the atmosphere, causing backward pressure in the cerebral veins, is an essential agent. With the altered balance of the circulation there is a change in the balance of active pressure; it is less from within and more on the surface—it is less expansive and more compressing. With a certain amount of compression consciousness is suspended."

First Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution, 1879-80. By J. W. Powell, Director. Washington: Government Printing Office, 1881. Pp. xxxiii. 603.

In this magnificent and lavishly (for the most part finely) illustrated volume, the Report proper is followed by a variety of Memoirs, from different hands, on the anthropology of North American Indians. Especially notable here is the longest memoir of all (pp. 269-552) by Col. Garrick Mallery, on "Sign Language," which enters at some length into the general theory of the subject and brings together from other sources a quantity of matter for the comparative study of the very elaborately recorded and figured gestures of the Indian tribes. The Director also, in several shorter memoirs, "On the Evolution of Language," "Sketch of the Mythology of the N. A. Indians," and "On Limitations to the Use of some Anthropologic Data," is seriously concerned to bring the objective work of the Bureau into relation with the results of psychological inquiry and philosophical thought. Future Reports will be looked forward to with interest by all who see the present one.

La Psychologie de l' Association depuis Hobbes jusqu' à nos Jours. (Histoire et Critique.) Par Louis Ferri, Professeur à l' Université de Rome. Ouvrage couronné par l' Académie des Sciences morales et politiques. Paris: Germer Baillière, 1883. Pp. 378.

For the present, we note only that this prize-essay by the distinguished Roman professor is divided into three parts. The first two are historical, in accordance with a division he makes of two periods—the earlier extending from Hobbes, Locke, and Berkeley, through Hume and Hartley, to Priestley and E. Darwin (pp. 1-77); the later from Brown, through the Mills and Prof. Bain, to Mr. Spencer (pp. 79-225). In the remaining critical part (pp. 228-336), Association is considered as involved in the production and the reproduction of knowledge, as accounting for mental faculties, the notion of personality, &c., and in its other psychological and metaphysical applications. An Appendix gives some special citations bearing on the history of the doctrine, with M. F. Bouillier's Report to the Academy on the merits of the Essay.

Hume-Studien. II. Zur Relationstheorie. Von Dr. Alexius Meinong, a. ö. Professor der Philosophie an der Universität in Graz. Wien: Gerold's Sohn, 1882. Pp. 182.

Dr. Meinong, the first part of whose *Hume-Studien* was reviewed in Mind XI., 386, takes as the subject of his second part the general theory of Relation. His method is the same as when he treated the doctrine of Modern Nominalism. He goes forward

from Hume to the later English thinkers, also backward to Hume's predecessors; and in the present case has so much to say, before Hume, on Locke's theory of Relation that the 'Study' might be named as much after the one as the other. It is, in fact, part of the author's object, in these careful studies of English philosophical thought, to bring Locke again into due credit in Germany. The present essay is intended as only a first handling of the fundamentally important subject with which it deals, to be followed up by a more exhaustive treatment. Such as it is, we hope to examine it more closely on another occasion.

Grundzüge der Naturphilosophie. Dictate aus den Vorlesungen von Hermann Lotze. Leipzig: Hirzel, 1882. Pp. 112.

The fifth of the series of Lotze's paragraphs for dictation in lecture, prepared for the press by Prof. E. Rehnisch. They are presented by the editor under the following heads: Introduction; Motion; Moving Forces; Mass, Matter and Space; Nexus of Natural Processes; Physical Hypotheses; Organic Life. At the end is given Lotze's leaving-certificate from the University of Leipsic, as a student of philosophy and medicine.

Die Grundprobleme der Logik. Von Dr. Jul. Bergmann, ord. Prof. der Philosophie an der Universität zu Marburg. Berlin: Mittler, 1882. Pp. 196.

In the author's *Pure Logic* published in 1876 and noticed in Mind XVII., the intention was stated of preparing a second volume on *Applied Logic*. Instead of completing this, however, he has now felt compelled to publish, in a new shape, a general review of his position; chiefly owing to the difficulties felt by some of his former readers. At a first glance, the new volume appears to consist mainly of a re-statement and re-arrangement, in a more condensed fashion, of some of the leading views expressed in the former one. [A. S.]

Die Schriften Notkers u. seiner Schule. Herausgegeben von Paul Piper. Erster Band, erste Liefg. Freib. i. B., u. Tübingen: Mohr, 1882. Pp. clxxxiii., 368.

Reprint of the works of Notker (d. 1022) and his school at the monastery of St. Gallen. Of the first volume, which is to include the philosophical works, the present first part (after an elaborate introduction) gives the translation of Boethius's *De Consolatione Philosophiae*, with commentary, in early German.

Il nuovo Realismo contemporaneo della Teorica della Conoscenza in Germania ed Inghilterra. Studio critico di Giovanni Cesca,[1] Dottore in filosofia e lettere. Verona e Padova: Drucker e Tedeschi, 1883. Pp. 193.

[1] Printed, by mistake, Cerca in the notice of a previous book, Mind XXIX., 143.

"The new Realism" is the doctrine that is to reconcile the admission "that something exists independently of consciousness" with the principle of the relativity of knowledge. The first part of the present volume is an exposition of the theories of the external world that were formulated by Descartes, Locke, Berkeley, Hume, Reid, and Kant. This serves as a historical introduction to the next two parts, in which "contemporary German realism" and "the new English realism" are critically studied. In the fourth part, the results of the preceding investigation are summed up and the doctrine of the author himself is explained. He regards Mr. Spencer's "transfigured realism" as nearest the true doctrine; but the thing-in-itself must be thought of merely as "the objective factor in experience," not as identical with the absolute. The theory of knowledge does not make the attempt to get rid of dualism; it leaves this for metaphysic. By studying the conditions of the evolution of consciousness, we find ourselves compelled to admit something beyond consciousness. This result cannot be obtained unless we admit the objective validity of the law of causation. Kant could not admit this consistently with his principles, and the law of causation was with him purely *a priori*; but for evolutionists this difficulty does not exist. [T. W.]

Emanuele Kant. Per Carlo Cantoni, Professore di Filosofia all' Universita di Pavia. Vol. secondo. "La Filosofia Pratica (Morale, Diritto, Politica)." Milano: Brigola, 1883. Pp. xv., 430.

This volume continues Professor Cantoni's exposition of the Critical Philosophy, but does not complete it. The account of the æsthetical, teleological and theological views of Kant is held over for a third volume. It is now three or four years since the appearance of the first volume (see Mind XVI., 601) which was devoted mainly to the *Critique of Pure Reason* and the *Metaphysic of Natural Science*. The qualities there noticeable distinguish the present exposition of Kant's ethical and political doctrine. A clear style, very complete knowledge, and an eminently judicial faculty enable Professor Cantoni to give what may fairly be called an *objective* representation of the Kantian theory. A good study of the predecessors of the Kantian ethical doctrine (pp. 1-50) and a critical examination of the doctrine itself (pp. 207-272) add to the interest of the work. We hope soon to recur to Professor Cantoni's work and to give a more complete account of its merits. As it stands at present, wanting the third volume, many threads are left loose which the author will have to gather together, and on his success in this task the value of the whole must depend for the greater part. [R. A.]

IX.—MISCELLANEOUS.

Under the new Statutes of the University of Cambridge, Electoral Boards have been constituted both for the existing Chair of Moral Philosophy (in which Mr. H. Sidgwick is at present acting as deputy for Prof. Birks, who is disabled) and for a Chair of Logic and Mental Philosophy which it is decided to create within a short time, as soon as funds are available for its endowment. The Boards are largely composed of experts in the different subjects, including some who have no connexion with Cambridge.

A portrait of Professor Bain, subscribed for by "Old Students and Friends" and painted by Mr. George Reid, R.S.A., has been presented to the University of Aberdeen. The remainder of the fund raised in recognition of Prof. Bain's services, on his retiring from the Chair of Logic at Aberdeen in 1880, has been devoted to the founding of a gold "Bain Medal," to be awarded yearly for philosophical study in the University.

Messrs. Appleton & Co. of New York have published, under the title *Herbert Spencer on the Americans and the Americans on Herbert Spencer* (pp. 96), "a full Report of his Interview and of the Proceedings at the Farewell Banquet of Nov. 9, 1882," with a short preface by Dr. E. L. Youmans. The report of the "Proceedings" at the Banquet not only includes the speeches delivered, with the letters of apology sent by eminent men who were unable to be present, but also three "unspoken speeches" (suppressed at midnight) which are thus described: "What Mr. Youmans did not say"; "What Mr. Ward was ready to say"; "What Mr. Leland got no chance to say". What Dr. Youmans "did not say"—to the toast of "Spencer's Philosophy of Evolution: the most original achievement in the history of thought"—is worth reading for the sketch it gives of the evolution of Mr. Spencer's own thought.

The Journal of Speculative Philosophy.—Vol. XVI. No. 3. S. H. Hodgson—Philosophy in relation to its History. E. Trentowski—The Sources and Faculties of Cognition (trans.). J. Dewey—The Pantheism of Spinoza. Hegel—On the Absolute Religion (trans.). M. W. Sewall—The Idea of the Home. A. Wilder—The Chaldæan Oracles (reprint of Thomas Stanley's translation, with notes). M. Tuthill—Use, Beauty, Reason. C. E. Lackland—Mephistopheles. Notes and Discussions.

Revue Philosophique.—VIIIme Année, No. 1. C. Levêque—L'esthétique musicale en France: iii. Psychologie de l'orchestre et de la symphonie. G. Séailles—Philosophes contemporains: M. J. Lachelier (i.). G. Tarde—La statistique criminelle du dernier demi-siècle. Notes et Discussions (P. Tannery et A. Fouillée—La liberté et le temps). Analyses et comptes-rendus (J. Watson, *Kant and his English Critics;* G. J. Romanes, *Animal Intelligence).* Rev. des Période. Correspondance (L. Dauriac—Sur la mémoire de l'intonation). No. 2. F. Bouillier—De la responsabilité morale dans la rêve. Th. Ribot—L'anéantissement de la volonté. J. Joly—Les origines du droit dans leur integralité. Analyses, &c. Notices bibliog. Rev. des Période. Correspondance (A propos de la réforme du baccalauréat). No. 3. C. Richet—La personnalité et la mémoire dans le somnambulisme. M. Guyau—De l'idée de sanction. G. Séailles—Philosophes contemporains: M. Lachelier (fin). Analyses, &c. (M. Müller, *Kant's Critique of Pure Reason,* &c.). Rev. des Période. Correspondance (M. Poletti—A propos de la statistique criminelle).

La Critique Philosophique.—XIme Année, Nos. 43-52. Sh. Hodgson—Analyse de la série des percepts (43). F. Pillon—Le but supérieurs

de la pédagogie (44): L'evolutionnisme italien (47). C. Renouvier—Réponse à différentes objections contre le fondement juridique de la morale (45, 46, 48, 49); Les nouvelles chicanes contre la possibilité du libre arbitre (50); Les objections de M. Fouillée contre la conciliation du libre arbitre avec les lois du mouvement (51).

La Filosofia delle Scuole Italiane. Vol. XXVI. Disp. 1. L. Ferri Un nuovo libro sulla coscienza. B. Labanca—Le distrazioni mentali. P. d'Ercole—L'ente possibile, ossia la base filosofica. T. Mamiani—Intorno alla sintesi ultima del sapere e dell'essere. T. Ronconi—Sulle induzioni che J. S. Mill dice improprie. T. Mamiani—Marsilio da Padova riformatore politico e religiose del secolo XIV.; studiato da Labanca. T. M.—Primo concetto d'un congresso di filosofi Italiani nel prossimo anno 1883.

Rivista di Filosofia Scientifica. An. II. No. 1. G. Buccola—La memoria organica nel mecanismo della scrittura, ricerche sperimentali. A. Asturaro—Egoismo e disinteresse (Bentham e Kant). G. Seppilli—Le basi fisiche delle funzioni mentali: ii. La circolazione del sangue nel cervello in relazione ai fenomeni psichici (con quattro tavole). Riv. Sintetica (E. Morselli—Il Démone di Socrate), &c.

Zeitschrift für Philosophie, &c.—Bd. LXXXII. Heft 1. W. Schuppe—Was sind Ideen? Aprent—Zur Erkenntniss des Wesens der Materie. Achelis—Ueber die sogenannte reine Erfahrung des Empirismus. Recensionen (J. H. W. Stuckenberg, *Life of I. Kant;* G. S. Morris, *Kant's Critique of Pure Reason*, &c.). Bibliographie.

Philosophische Monatshefte.—Bd. XIX. Heft 1, 2. A. Harpf—Goethe's Erkenntnissprincip. J. Bergmann—Einige Bemerkungen zu R. Lehmann's Aufsatz "Ueber das Verhältniss des transcendentalen zum metaphysischen Idealismus". E. v. Hartmann—Zur Pessimismus-Frage. Recensionen. Literaturbericht. Bibliographie, &c.

Vierteljahrschrift für wissenschaftliche Philosophie.—Bd. VII. Heft 1. E. Laas—Aphorismen über Staat u. Kirche. F. Staudinger—Zur Grundlegung des Erfahrungsbegriffs (ii., Schluss). Ths. Achelis—Die Ethik der Gegenwart in ihrer Beziehung zur Naturwissenschaft. Anzeigen. Selbstanzeigen, &c.

Philosophische Studien (Herausg. von W. Wundt).—Bd. I. Heft 4. W. Wundt—Die Logik der Chemie: Eine methodologische Betrachtung. E. Tischer—Ueber die Unterscheidung der Schallstärken. E. Tischer—Bemerkungen über die Messung von Schallstärken mit Rücksicht auf psychophysische Versuche. W. Wundt—Ueber die Methode der Minimaländerungen. E. Kraepelin—Ueber die Einwirkung einiger medicamentoser Stoffe auf die Dauer einfacher psychischer Vorgänge (ii.) W. Moldenhauer—Notiz über die einfache Reactionszeit einer Geruchsempfindung. W. Wundt—Schlusswort zum ersten Bande.

Other Books, &c., received: C. N., *What is Religion*, annotated by R. Lewins, London (Stewart), pp. 63. W. J. Gill, *Analytical Processes*, New York (Smith), 1876, pp. 483; also three recent Papers reprinted from the Boston *Index*. W. James, *The Sense of Dizziness in Deaf-mutes*, Cambridge, U. S. (Rep. from *Amer. Journal of Otology*, Oct., 1882), pp. 16. G. S. Hall, *The Education of the Will* (Rep. from *Princeton Review*, Nov., 1882), pp. 34. M. J. Savage, *H. Spencer: His Influence on Religion and Morality*, Boston (Ellis), pp. 14. H. P. Bowditch and G. S. Hall, *Optical Illusions of Motion* (Rep. from the *Journal of Physiology*), pp. 11. O. Liebmann, *Ueber philosophische Tradition*, Strassburg (Trübner), pp. 32. A. Stöhr, *Vom Geiste*, Wien (Hölder), pp. 38. G. Cesca, *Le Teorie nativistiche e genetiche della Localizzazione spaziale*, Verona e Padova (Drucker e Tedeschi), pp. 158.

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MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

I.—A CRITICISM OF THE CRITICAL PHILOSOPHY.[1]

II.

It would, I suppose, be generally held by those who regard the "Return to Kant" as the next step which English philosophy ought to take, that the 'Transcendental Analytic,' in which a metaphysical basis is constructed for physical science, is, of all Kant's work, the most immediately important for English students. To Kant himself, indeed, the negative and destructive side of the argument in the first *Kritik*, which is mainly developed in the 'Transcendental Dialectic,' was, I think, more fundamentally important than its positive side: he was more concerned to demolish dogmatic metaphysics than to establish physical science, of which the principles and procedures appeared to him to be adequately guaranteed by experience, without any transcendental deduction. But the destruction of Rational Psychology, Cosmology and Theology has but a remote interest for English students of philosophy. This kind of dogmatism has never been dominant among us since the time of Locke: some kind of rational theology, indeed, has been kept in existence by the argumentative needs of positive theology, but it can hardly be said that any system or method of rational theology—at least in the Kantian sense—is a force to be seriously reckoned

[1] Concluded from Mind XXIX.

with at present, in the region of independent philosophical speculation. At any rate all the schools of philosophy that were dominant in England when Kantism began to be preached—Empiricism Idealistic and Materialistic, and the philosophy of Common-sense as represented by Hamilton—agreed in accepting what we may speak of broadly as the negative results of the *Kritik;* and even granting that they got at these results too hastily and by too short cuts, still, it would hardly be of fundamental importance to return to Kant in order to reach the goal of philosophic nescience by a more regular road.

Again, it may reasonably be held that Kant himself attached paramount importance to what may be called the ontologically constructive part of his system, the establishment of the belief in "God, Freedom and Immortality" on the basis of practical faith. Indeed, for Kant as a man, we may almost say that the rest of his work was only valuable as leading up to these conclusions: and it is characteristic of Kant that he never seems to lose the man in the philosopher. But no serious attempt has yet been made, by those who are commending Kant to our notice, to lead the English mind to his moral theology: and since, as I explained in my former article, my concern now is not with Kant historically regarded but with Kantism offered as a method of dealing with our present philosophical problems, it would be idle to criticise the Kantian moral theology until some competent expositor seriously asks us to believe it.

It is, therefore, the theory of knowledge given mainly in the 'Analytic' which is to ground us in Kant; and it is accordingly against this theory that one who declines to be thus grounded is called upon to direct his main criticisms. It is true that the 'Analytic' presupposes the exposition of the forms of sensibility given in the 'Æsthetic'; but the only conclusion that it is needful—or even desirable—to carry from the latter to the former is just that Time and Space are necessary forms of sensibility. This is all, I conceive, that Kant holds to be requisite in order to explain how the synthetical *a priori* propositions of geometry or arithmetic are possible. The understanding, of course, has to grasp the particulars of *a priori* intuition in order to construct a mathematical proposition; but Kant does not consider that an explanation of this process is required for the establishment of the possibility of pure mathematics.

The question, then, which the elaborate analysis of the 'Analytic' is required to answer relates primarily to the legitimacy of the synthetical *a priori* propositions of rational

physics (including applied mathematics):—I say "legitimacy" because in the present article I shall not take Kant's argument as *assuming* the universal validity of such propositions, but as designed to establish their validity in respect of all objects of sensible experience.[1] This question is only directly dealt with in the part of the treatise which deals with the systematic presentation of the Principles of the Pure Understanding: to which accordingly, from this point of view, the preceding discussions must be considered merely as introductory. But in fact the problem which Kant is called upon to solve has become more comprehensive by the attainment of the conclusions of the 'Æsthetic'. If Time and Space are merely forms of our sensibility, our empirical cognitions of particular objects seem to require explanation as much as our universal cognitions relative to such objects. If things do not really exist in time and space independently of our consciousness, why do we ordinarily think of them as so existing, and why is this thought apparently confirmed by the whole of our experience, including the communicated experience of other human beings? What is the real significance of this mass of apparently certain and consistent cognitions, by an indefinite number of human beings, of one aggregate of material things, extended and moving in one space and perduring through one time?

This, I say, is the problem with which, I conceive, Kantism is called upon to deal; but it is importantly different from the problem with which Kant actually does deal, though I cannot perceive that he ever shows an adequate consciousness of the difference, while his English expositors appear to ignore it altogether. For instance, Mr. Watson tells us repeatedly that Kant offers an explanation of "the special facts of ordinary experience" (as well as "the laws embodied in each of the special sciences"); that "he sought for a hypothesis adequate to account for the facts in their completeness".[2] But Kant, so far as I am aware, nowhere

[1] See my former article, MIND XXIX., pp. 76-83. Since that article was written I have read with much interest Dr. Vaihinger's full and careful discussion of Kant's starting-point and procedure in his *Commentar zu Kant's Kritik der reinen Vernunft*, I., 2. I am glad to find myself in substantial agreement with the conclusions of this learned and acute commentator, at least on the most important questions raised by him.

[2] *Cf. Kant and his English Critics*, chap. 1. I must observe that Mr. Watson is peculiarly unfortunate in his language; since Kant has expressly repudiated, in the strongest possible terms, the notion that his reasoning involves a "hypothesis". *Cf.* Pref. to 1st ed., p. 9, "Ich habe mir selbst das Urtheil gesprochen dass in dieser Art von Betrachtungen . . . alles was einer Hypothese nur ähnlich sieht, verbotene Waare sei".

professes to explain—and certainly nowhere does explain—the apparent objectivity of our empirical cognitions so far as the *particular* characteristics of their objects are concerned; he is entirely occupied with their universal and necessary characteristics—which alone, in his view, are capable of being known *a priori*. He does not profess to give an account of what experience *is*, but what it *must* be; of the "rules of pure thinking of an object," "conceptions which may relate themselves to objects *a priori*," "principles without which no object can be thought".[1] How, indeed, could it be otherwise, if, as he has before told us, "no concepts which contain anything empirical are to be admitted" into Transcendental Philosophy?[2]

Let us take, then, the problem as Kant defines it, and endeavour to get a clear view of it, before we examine his method of solving it. In the first place, what precisely does Kant mean by the "Object," of which he proposes to determine the necessary conditions? What distinctions does he draw at the outset between objects and other nameables?

In the first place it seems evident that he does not, for the most part,[3] mean to include under this term all that, in a wider sense, we are accustomed to call "objects of thought" or "of knowledge". For instance, Logic, as Kant expressly tells us, is not concerned with objects: the forms of thought with which Logic deals are not "objects," for the general purposes of the 'Transcendental Analytic,' though of course capable of being scientifically known, and therefore of being compared and classified, and made the subjects of judgments universal and particular, affirmative and negative, categorical and disjunctive, &c. The "object" of Kant's transcendental analysis must have elements supplied by some sense. At the same time we cannot say that any feeling, or even any combination of feelings thought under one notion, can be an object in the narrower Kantian signification of the term. The latter might perhaps be inferred from the definition that Kant gives in one passage (§ 17, p. 118). "Object is that in the conception of which the manifold of a given intuition is united." But he has already explained ('Æsthetic,' § 3, p. 63) that the sensations of colours, sounds and heat, "because they are merely

[1] 'Transcend. Logik, Einleitung,' pp. 84, 5, 9. My references throughout are to Hartenstein's edition (1867).

[2] 'Einleitung,' p. 51.

[3] I insert this qualifying phrase, because there certainly seem to be some passages in which "Object" must be understood in this wider sense.

sensations and not intuitions, do not help us by themselves to know any object"; so that we cannot suppose that any synthesis of the manifold of such sensations would by itself constitute an object for Kant's purposes—not *(e.g.)* the synthesis of different sounds recalled under the notion of "the tune I heard last night". How then are we to distinguish the kind of sensible manifold of which the combination constitutes an object for Kant? So far as material objects are concerned,[1] we must, I conceive, identify it with what, in ordinary thought, is distinguished as an object of *perception* from mere sensation, by the implicit belief that it exists independently of our consciousness. Such an implicit belief, though Kant nowhere affirms it to be involved in the conception of an empirical object which he analyses, certainly seems to me to be more or less definitely suggested by much of the language that he uses about it. Take, for instance, the following (§ 14, p. 112): "All experience contains, besides the intuition of the senses, by which something is given, also a conception of an object which in the intuition is given, or appears". It seems clear that the object which is thought as appearing in the intuition is at the same time thought to exist independently of it: and the same may be said of the phrases elsewhere used, where an object is said to be thought "through" or "in relation to" a "Vorstellung".

In this way we seem led to the singular result that the combined manifold of sensible elements, which in Kant's view constitutes an object, can only be distinguished from other combined manifolds of feeling by a characteristic which Kant's theory declares to be illusory; the characteristic namely of being thought to have an existence independent of the perception in which it is presented. What I call outward objects are nothing but mere "modifications of my sensibility," merely "in me," "determinations of my identical self"; and yet in thinking of them as objects I inevitably think of them as existing independently of the modifications of my sensibility by which they are perceived. I do not see how this conclusion can be avoided; and yet I cannot perceive that Kant is ever clearly aware that the notion of an empirical object which he is occupied in determining *a priori* is a notion which contains this illusory element. On the contrary, in important parts of

[1] As the constructive importance of the 'Analytic' is explained by Kant himself to lie in its relation to the principles of physics, I may venture here to avoid the peculiar difficulties that I find in making Kant's view of "Selbst-anschauung" clear and consistent.

his argument he appears to me to forget that it is an illusion, in spite of the explicit language in which he has elsewhere characterised it as such. For we find among the characteristics of empirical objects laid down as *a priori* cognisable, that they must contain a (phenomenal) substance that is thought of as remaining unchanged amid all phenomenal change: but it seems impossible to think this and at the same time to think of all phenomena as merely modifications of my sensibility. Yet Kant nowhere seems conscious of this *primâ facie* contradiction, or makes any effort to explain it. It seems to him absurd that "the thing-in-itself" should "wander into my consciousness": yet, so far as I can see, neither he nor his English expositors find any difficulty in conceiving the phenomenal thing to wander out of it. Both he and they seem to hold that I can know objects to be merely modifications of my sensibility, combined in certain ways by my understanding; while at the same time I also conceive them as different from the modifications of my sensibility and as perduring when the latter cease. Indeed, this unconscious contradiction seems to run through Kant's use of his cardinal term "Vorstellung": the "Vorstellung" is now identified with its object, and now again contrasted with it, without any attempt at reconciling the two incompatible views. At one time we are told that "outward things are nothing but mere *Vorstellungen*,"[1] while again it is declared that, "the determination of my existence in time is only possible through the existence of real things which I perceive outside me and not through the mere *Vorstellung* of a thing outside me".[2] Will it be said that these really existent phenomenal things, though independent of *my* consciousness, are implicitly thought by me to be in relation to "consciousness in general," and that it is this relation which gives them their permanence, when they cease to be modifications of my sensibility? This—which resembles the Berkeleyan mode of reconciling Idealism and Common-sense—is an explanation certainly suggested by some passages in our recent English expositors of Kant. Thus (*e.g.*) Mr. Caird says,[3] that by the recognition of the data of sense as objective "the data of sense are taken out of their mere singularity as feelings, and made elements in a universal consciousness, in 'consciousness in general'; or, to put

[1] 'Æsthetic,' § 3, p. 64.

[2] In the 'Refutation of Idealism,' p. 198.

[3] *Philosophy of Kant*, c. viii., p. 341.

the same thing in another way, they are related to a consciousness, which the individual has, not as a mere individual, but as a universal subject of knowledge". But whatever happens to the data of sense in Kant's psychological laboratory, it is at any rate certain that they do not cease to be modifications of sensibility. Hence in order to explain how phenomenal things can be conceived to exist independently of my—or any other man's—sensibility, we should have to suppose not merely a rational consciousness which all men share, but a universal quasi-human sensibility, modified similarly to the human; and I need hardly describe the emphasis with which any such chimera would be repudiated by Kant.

I can only explain Kant's indifference to the difficulty above pointed out by referring it to the confusion—or at least fusion—that continually takes place in his mind between the phenomenal objects which are "insgesammt in mir," and the things-in-themselves of which the former are phenomenal. Here I am glad to find myself in close agreement with Mr. Caird, who says (c. v., p. 278) that Kant "treats the object which the understanding determines through synthesis of the manifold given in sense as *identical with, or at any rate phenomenal of,* the object that affects sense". To express my view exactly, I should vary Mr. Caird's phrase very slightly, and say that Kant always regards the one object as phenomenal of the other, but often identifies the two so completely that he speaks of both indifferently by the same name in the same passage, even in the very transcendental discussions in which the distinction between the two is of fundamental importance. Thus he tells us (§ 14, p. 111) that "two ways only are possible in which synthetical *Vorstellungen* and their objects can agree . . . either if the object alone makes the *Vorstellung* possible, or the *Vorstellung* alone makes the object possible. The former . . . is the case with phenomena in respect of what in them belongs to sensation"; whereas the latter, of course, is the case in respect of the forms of intuition and thought. Here it seems evident that the object which makes the *Vorstellung* possible so far as its sensational elements are concerned, cannot be the phenomenal object which is itself constructed out of such sensational elements; it must therefore be the noumenal object which affects sensibility; on the other hand it seems no less evident that the object which the *Vorstellung* makes possible must be the phenomenal object.

To sum up: the notion which Kant has formed of the

Object which he seeks to determine *a priori* is not adequately clear or consistent; for, in the first place, while interpreting objectivity to mean universal validity, he does not clearly recognise that the particular objectivity of our common material world, assumed in ordinary thought and the reasonings of physical science, lies beyond the range of his *a priori* explanation; and, in the second place, he surreptitiously includes in the notion of his (phenomenal) object the characteristic of existing in some manner independently of our sensibility, which is inconsistent with his reduction of its matter to mere modifications of our sensibility, combined and ordered by thought.

Let us now pass to consider the manner in which he deals with the problem as stated by himself; that is, with the ascertainment of the *a priori* characteristics of empirical objects. Before examining the particulars of Kant's treatment of this problem, we may, I think, reasonably scrutinise the general nature of the method adopted. As I before hinted, I do not claim, in asking how Transcendental Philosophy "is possible," to "suspend all Transcendentalists from their business" until the question has been satisfactorily answered: I am aware that in the progress of knowledge many things have been done which had been plausibly shown to be impossible, and perhaps the work of Transcendental Philosophy may be one of them. I only ask the general question, because the defects that I find in the details of Kant's method are just such as I should expect to find in the work of a philosopher who had never seriously applied to his own procedure the criteria by which that of his dogmatic predecessors had been tried and found wanting.

How, then, does Kant think that we can know the necessary intellectual conditions of experience? To a "dogmatic" metaphysician, of course, the question would not seem to present any particular difficulty; for these intellectual conditions are a part of the universe of being, and there would seem to be no obvious reason why they should not be known as well as anything else, and at least no *a priori* reason why they should not be known *a priori*. But the case is *primâ facie* different for Kant; since the great negative result of his 'Analytic' is that the categories or fundamental forms of thought are only of use for binding together the impressions of sensibility, and can only produce positive knowledge by their application to these impressions; so that no knowledge is possible of things that cannot be made objects of experience. But if we are unable to penetrate to things *beyond* experience, why should we be any more able to discover the

conditions which lie—if I may so say—*behind* it; since the latter cannot any more than the former become empirical objects, according to Kant's definition of the term?

To this question Kant's language in the 'Introduction' suggests the very naïve answer that I have got my mind by me and therefore must be able to find out all about it; so that there can hardly be any difficulty in framing a complete inventory of the "curta supellex" of my *a priori* possessions.[1] It does not clearly appear why the scantiness of our intellectual furniture should be thus taken for granted: *primâ facie*, the world of thought is as extensive as the world of things; how then can we know *a priori* that Thought's own resources are so limited? But granting this assumption, it is at any rate manifest that the inventory cannot be made out by any direct observation of my faculties, but only by a reflective analysis of their products, experience and thought about experience; and in fact, I presume, it is by such an analysis that Kant conceives logicians to have separated the formal *a priori* element furnished by the understanding in ordinary empirical judgments. Let us grant that this separation can be performed, and that the eleven or twelve forms thus obtained can be demonstrated to be necessary: it still seems to me unwarrantable to assume that they are derived from the mind and not from external sources. But as this fundamental assumption is common both to the 'Æsthetic' and to the 'Analytic,' it has been sufficiently dealt with in my former article, and I need not dwell upon it further. Here I will only observe that, even if we grant this assumption, and accept the general accuracy and "apodictic" certainty of the analysis of judgments performed by logicians: it still does not appear how the results of this analytical procedure can be known to have the systematic completeness which Kant repeatedly claims for them, and on which he lays great stress.[2] He seems to think that because the Understanding or Faculty of Judging has an essential unity—we will afterwards enquire how this, again, is known—therefore its fundamental forms have been obtained from a common principle, and therefore systematically, and therefore completely. But in fact he has established no kind of rational relation between the unity of the

[1] *Cf.* 'Einleitung,' § vii., p. 50. "Der Verstand . . . dessen Vorrath, weil wir ihn nicht auswärting suchen müssen, uns nicht verborgen bleiben kann," &c.

[2] *Cf.* 'Analytik der Begriffe,' 1st Hauptst. beginning pp. 91, 2, and the contrast of his method with that by which Aristotle's categories were obtained; also 3 Absch., p. 101.

understanding and the multiplicity of its forms—the categories are no more systematised by being referred to one understanding than beads are systematised by being strung on one string. What Kant does is simply to take these forms from the ordinary logic, subject to one or two changes for which the need, he thinks, is evident when we pass from the point of view of General to that of Transcendental Logic; and to assume their systematic completeness. His confidence in the traditional logic would seem to be due to what he notes as a remarkable characteristic of this science, *viz.*, that it was completed by its founder Aristotle, and has "taken no step forward" since his exposition. The characteristic would certainly be a remarkable one, if it were correctly attributed: but in fact it is rather Kant's historical blunder that is remarkable, since the very forms of judgment to which the Transcendental Philosophy gives special prominence—the different kinds of Relation—are not clearly or expressly distinguished by Aristotle, who pays no attention to any but categorical reasoning. There could not be a more striking proof that the method of reflective analysis, by which alone the forms of judgment and reasoning would seem to be ascertainable, does not ensure systematic completeness.

But let us suppose that Kant's inventory of the forms of judgment is perfect, and may be known to be so with apodictic certainty: the important part of his task still remains: he has to show with the same certainty how they are necessarily applied in our experience of objects. Now the cognition of an object through sense is not a judgment, though it may involve judgments, explicit or implicit: it requires, as Kant explains, the co-operation of Understanding, Imagination, and Sense: and it is in the account of this co-operation that the difficulty of obtaining any certain or trustworthy results by his method becomes most manifest. I suppose that every one who, accustomed to English empirical psychology, has come to Kant expecting to have the necessary conditions of experience demonstrated to him by a non-empirical method, must have felt astonished and bewildered at the elaborate psychological system put forward in the 'Transcendental Analytic'. Kant appears to be, if I may so say, at home among his faculties behind the scenes, where a process is supposed to go on of which only the results are presented on the stage of empirical consciousness: and in tracing this process he gives us statement after statement which if not empirical must be nakedly dogmatic—"synthetic *a priori*" propositions, in a region where it would seem that no *Anschauung* can be supposed to come in.

For instance; it is laid down at the very outset of the treatise that Sense is passive or "Receptivity," Understanding active or "Spontaneity"; and accordingly that sense-perceptions depend on "affections," conceptions on "functions" and "acts".[1] Now it is hardly necessary to say that Sense and Understanding are, in Kant's view, distinguishable by other characteristics besides the pair thus contrasted: *viz.*, that sense is the source of the concrete, particular element in our cognition, and Understanding of general notions. This is evident *(e.g.)*, from the argument in the 'Æsthetic' by which Space is shown to be a form of Sensibility as distinct from Understanding: since this argument does not introduce the distinction of "activity" and "passivity": its point consists entirely in showing that Space is not merely a generic term for many similar relations, including an indefinite number of spaces "under" it, but represents a concrete whole including "in" it all particular spaces. It seems clear therefore that in the statements that Sense is passive or a Receptivity and Understanding active or a Spontaneity we have, implicit or explicit, synthetical universal propositions; and hence, I conceive, Kant is bound to explain how these synthetical universals are supposed to be known. If they are to be "apodictically" certain, as is implied in Kant's account of his method, whence is this certainty to be derived? If it is obtained independently of ordinary experience we seem to require, on Kant's principles, some sort of transcendental intuition which shall present us not with things in space or events in time, but with the nature or relations of the "Vermögen" or "Fähigkeiten" of the human mind. If no such chimerical source of knowledge is assumed—and I need hardly say that it is not claimed by Kant—the only alternative is to suppose that reflection on ordinary experience shows us a *necessary* connexion of inactivity with particularity and of activity with generality in our cognitions. But if the terms "active," "receptive," &c., connote—as they seem to do—the presence or absence of the empirically known fact of volition, I cannot conceive how the connexion can be thought to be necessary; since experience—at least my experience—does not present it as universally subsisting: I can find numberless instances in my experience of general notions presenting themselves in

[1] "Functionen," "Actus," "Handlungen". I cannot profess to understand the exact relation of "Function" and "Handlung" in Kant's terminology; since I find that "Function" is stated to be "die Einheit der Handlung" &c., and on the other hand that "alle Urtheile" are "Functionen der Einheit".

consciousness without my being conscious of any antecedent volition: and I know no ground for assuming an unconscious volition in such cases. If, again, it be said that the terms "active" and "spontaneity" are not intended to imply conscious volition, I ask what conceivable attribute they can signify, and how this can be known, either in experience or out of experience, to be universally predicable of the mental source of general notions. Will it be suggested that the mind may be said to be "active" so far as the qualities or characteristics of *cognita* are regarded as effects of which the mind, and not anything outside the mind, is the cause? The least reflection will show that this cannot be Kant's meaning; since in this sense, "activity" must be attributed to the mind *quâ* sensible as well as to the mind *quâ* intellectual. For not only is the matter of sense-perception, according to Kant, necessarily "formed" by Sense no less than by Intellect; even this matter must be conceived to be what it is, partly because the human mind is such and such, and not merely because external causes are such and such.

I have laboured—I fear to the weariness of the reader—in endeavouring to find a plausible ground for this transcendental dogma of the essential activity of intellect in contrast to the passivity of sense, because the indirect importance of it in Kant's *a priori* construction of objects of experience appears to me very great; since it is, as I conceive, concerned in the parentage of two other synthetical universal propositions, which have somehow escaped the barrier of Criticism, and roam freely through the argument of the 'Analytic,' doing serious damage to its cogency. These are explicitly enunciated in the following passage at the commencement of the 'Deduction of the Categories,' as rewritten by Kant in his 2nd edition (§ 15, p. 114.)

"The connexion *(conjunctio)* of a manifold can never enter into us through the senses, . . . for it is an act of the spontaneity of the *Vorstellungskraft;* and as, in order to distinguish this from sensibility, we must call it understanding, we see that all connecting, whether we are conscious of it or not . . . is an act of the understanding. This act we shall call by the general name of *synthesis*, in order to show that we cannot represent to ourselves anything as connected in the object, without having previously connected it ourselves, and that of all *Vorstellungen* connexion is the only one which cannot be given through objects, but must be accomplished by the subject itself, because it is an act of its spontaneity."

It will be admitted that we have in this argument two synthetical universal propositions: first, that the Senses *cannot* be the source of that combinedness or connexion of manifold sense-data which is an element of the notion of an object of

experience: and, secondly, that the Understanding *must* be the source of this, being the sole faculty of synthesis. Now here again, as in the case of the proposition just discussed, I must ask the reader to bear in mind that my objections to Kant's argument are not dogmatic but critical: I do not profess to prove the contradictory of either of these fundamental assumptions: I merely urge that they require a justification which yet, on Kant's own principles, it seems impossible that they should obtain. How can I know as a necessary truth that the Faculty or Receptivity by which the concrete particular element of cognition is obtained cannot be the source of the unity in which the manifold data of sense are combined when thought of as qualities of an object? I imagine that Kant is led to affirm this dogma by first inferring from the physical separateness of the chief organs of sense that sensations, as physical facts, are originally separate and so require a process of combination, and inferring, secondly, from the passivity of sense that it cannot be the source of this combination. But it is, of course, obvious that we have here no concern with the physical antecedents or concomitants of sensation. From the point of view of transcendental analysis, I can only define Sense as the source of particular concrete elements of cognition; and if so, it is surely quite unwarranted, except on the assumption of some such transcendental *Anschauung* as I before suggested, to affirm that sense *cannot* present us with these elements as conjoined. Even supposing that in experience combination or conjunction was found to be always due to the activity of the mind—so far as this is empirically cognisable,—this empirical evidence could not, on Kant's principles, give his proposition the apodictic certainty with which he claims to lay it down.

But though the confirmation of experience could not supply Kant's argument with the basis that it requires, it may not be irrelevant to ask how far experience does confirm it. So far as my own experience goes, it seems to me certainly true that, for a clear and distinct perception of an object, some amount of voluntary attention is necessary: but it does not seem to me that the volition which thus comes in has any more relation to the unity of the object than it has to the manifold of sense-data: it rather appears that both the manifold elements and their conjunction are vaguely and obscurely given in the kind of sense-perception that can occur without conscious attention, and that both are *pari passu* raised out of this vagueness and obscurity by the voluntary act of attending to, or concentrating conscious-

ness on, them. Further, that the combination of sense-data may be perfectly involuntary would seem to be shown,—so far as experience can show it,—by the coalescence of primary and revived feelings through association to which our recent empirical psychology has given great prominence: since in many cases the coalescence is so complete that the distinctness of the elements is indiscernible in ordinary consciousness, and requires a trained faculty of analysis to apprehend it.

It may be said that this kind of coalescence is quite different from the conjunction of which Kant speaks, and could not give us our notion of the "unity" of the object. Even if this were granted, it would only make way for a similar argument against Kant's theory: since I do not see how the cognition of an object of perception as *one*, involving as it does a distinction of the one object from other concomitant sense-percepts, is in the least explained by Kant's reference of this unity to the necessary unity of self-consciousness. I have endeavoured to separate this reference from the argument discussed in the preceding paragraph, because I admit the proposition that self-consciousness[1] "must be able to accompany all my *Vorstellungen*" as one of which reflection shows the contradictory to be inconceivable. I cannot conceive a feeling, thought, or volition as mine, without conceiving it as referred to a permanent identical self; and in this reference it is implicitly conjoined with other phenomena of the same self. But I see no ground for identifying this conjunction with the conjunction of the manifold in an object. The differences between the two kinds of synthesis appear to me fundamental. First, self-consciousness accompanies all mental phenomena in the same manner—if not empirically in the same degree—and therefore conjoins all alike to each other; whereas an object is always known as distinguished from other objects and from merely subjective feelings of the percipient. Again, the essential characteristic

[1] I do not mean that this proposition is exactly Kant's: indeed in translating "das Ich denke" by self-consciousness I have excluded the implication that the "Ich" of self-consciousness is a "thinking" as distinct from a "feeling" Ego, in order not to anticipate the subsequent discussion as to the relation of self-consciousness to the operations of the understanding. I am also unable to follow Kant in the distinction that he endeavours to establish between "pure" self-consciousness, cognisable *a priori* as a necessary accompaniment of "Vorstellungen," and empirical self-consciousness. *E.g.*, his statement, "Das empirische Bewusstsein . . . ist an sich zerstreut und ohne jede Beziehung auf die Identität des Subjects," seems to me the reverse of true: I can suppose "Vorstellungen" to take place without self-consciousness, but I cannot conceive a consciousness accompanying these which does not involve a reference to the "identity of the subject".

of the unity given by self-consciousness is that it is a unity combining changes or successive differences: whereas the unity required for the notion of an object necessarily involves the combination of simultaneous differences. Indeed, if appeal be allowed to experience, nothing can be more manifest than that the conjunction of the varying elements of consciousness which is given by their reference to an identical self has no tendency to bind them into objective union. Thus *(e.g.)* when we wake from a dream, we are simultaneously conscious of the identity of our dreaming self with our waking self, and of the absence of any connexion between the apparently objective world of the dream and the world in which we find ourselves on waking.

But further: even if it were granted that the synthesis of the manifold in an object cannot be attributed to the mind *quâ* sensitive and merely receptive, but must be due to an "act of the spontaneity of the *Vorstellungskraft*," it still seems to me unwarrantable to identify the source of synthesis with the Understanding, as Kant has previously defined and used this term—that is, with the faculty of judgment, of which the fundamental forms are given in the list of categories. There is indeed a singular *naïveté* in the phrase by which Kant, in the passage above quoted, announces this identification. He says that "die Spontaneität der Vorstellungskraft" must be *called* Understanding "to distinguish it from Sense". But why must it be so called, or rather, *can* it be so called, consistently with the account that Kant has previously given of Understanding and its operations, without surreptitiously introducing a synthetical *a priori* proposition, at least as illegitimate as any of the dogmas of Rational Psychology that Kant afterwards attacks? What ground have we for assuming that the Faculty of Conception and Judgment or "mediate cognition through concepts" is also the faculty to which the synthesis that forms an object of perception out of sense-data is due; and accordingly assuming that the forms of judgment, as analysed and classified by logicians, will also regulate this latter synthesis? It is not enough to say that we cannot actually separate perception and conception, and that percepts can be "nothing to us as thinking beings" unless thought under general notions: because, so far as this is true, it is equally true of the sensations which Kant distinguishes as merely subjective, such as the "fine flavour of wine, which does not belong to the objective characteristics of the wine, even considered as a pheno-

menal object".[1] Such flavours, however, when reflected upon and considered merely as feelings, necessarily become —in the wider sense which I before distinguished from Kant's—'objects' of thought and judgment; they are classified in wider and narrower groups, distinguishable by differences of quality, which we apply as predicates in judging of all, some or one of the group, categorically, hypothetically or disjunctively. Thus I may judge that some or all various flavours are agreeable, that the flavour of this claret is full but not delicate, that if the flavour of Chablis be combined with that of oysters the pleasure of both is heightened, that the flavour of champagne is either sweet or dry, &c., &c. But it appears obvious to me, and I understand Kant to hold, that this application of the forms of judgment has no tendency to give objectivity—in the Kantian sense—to the merely subjective feelings thus reflectively compared and analysed: hence there is no apparent reason why it should have this effect in the case of the other sense-data which do become elements of phenomenal objects.

Again, even if it were granted that the object of experience is the result of a synthesis of which the modes or forms are identical with those of the faculty of judgment, I cannot see that it would follow necessarily that we should be able, as Kant says, to determine intuitions in reference to the categories: *e.g.*, to say *a priori* that among the manifold of sense-data we shall find some element that can only be thought as the subject of empirical judgments while other elements can only be thought as predicates. This determination, however, is essential for Kant's purpose of supplying a rational basis for physics. In considering this part of his argument it is necessary to take note of the distinction and relations conceived by him to exist between Understanding and Productive Imagination: which I have so far avoided noticing, because, while they have no fundamental importance in reference to my criticism, I could not pretend to give a consistent account of Kant's doctrine with regard to them: since he sometimes expressly distinguishes the synthesis of the Imagination from that of the Understanding, and sometimes, with equal definiteness, speaks of "one and the same spontaneity under the names of Understanding and Imagination". At any rate it is some operation of this double-named spontaneity acting on Time, the pure form of all sensible experience, which gives us the "Schemata" or

[1] 'Transc. Æsth.,' § 3, p. 63.

a priori rules for the application of the categories to phenomena: *i.e.*, certain "time-determinations" which must necessarily characterise objects of experience whatever the particular quality of their sensible matter may turn out to be. Now I cannot perceive that Kant gives any good reason for expecting to find this correspondence between categories and time-determinations: all that appears to me to follow from his previous arguments—granting them valid—is that, *if* in virtue of the forms of judgment we can affirm anything *a priori* of objects generally, it must be something relating to time. Since, however, he considers that he has worked out this correspondence with systematic completeness, let us proceed to examine its details.

According to Kant, the four classes of categories—Quantity, Quality, Relation, and Modality—are correlated respectively to the "series of time," the "content of time," the "order of time," and the "Zeitinbegriff in Ansehung aller möglichen Gegenstände". The last quoted phrase does not seem to me very lucid, especially as "Möglichkeit" is one of the categories whose application has to be determined; and since the schematism of the categories of modality does not lead to any distinct principles of *a priori* physics, I shall confine my remarks to the first three heads. In dealing with these it will be convenient to consider, along with the schemata, the principles that are supposed to be cognisable through the necessary application of the category in each case: for it is in this way that the forced and violent character of the whole procedure, especially as applied to the first two groups of categories, is most easily seen. To begin with the first head. The "schema" of Quantity—the time-determination by which the application of the logical category of Quantity to phenomena is regulated—is said to be Number. Number is a "Zeitbestimmung" which refers to the "series of time": and on this *a priori* application of the logical category of quantity to time depends the axiom that "all intuitions are extensive quantities". Now there is doubtless an important difference between logical quantity and arithmetical quantity: in passing from the former to the latter we advance from the merely indefinite plurality, involved in the relation between a general notion and the particulars which it classifies, to a perfectly definite plurality. But I cannot perceive that the transition introduces a time-determination. I do not see that the definite plurality involved in the notion of number has any more essential relation to our sense-perceptions than the logical categories have: and since Kant expressly tells us that his

categories "unabhängig von Sinnlichkeit blos im Verstande entspringen," I suppose that their essential characteristics must, in his view, be conceivable independently of any reference to our forms of sensibility. But if conceivable at all, they clearly must be conceived as *twelve:* their *twelveness* must be as independent of time as any other of their characteristics. And, more generally, it seems obvious that the parts of any logical whole, when definitely known, are as essentially numerable as the parts of a physical whole: so that in Kant's definition "number is the unity of the synthesis of the manifold of a homogeneous intuition," the four last words appear to be an illegitimate restriction, according to his own view of the relation of Intuition to Thought. The only reason that Kant has for regarding Number as a time-determination would seem to be the fact that it takes time to count: the synthesis of which number is the result is effected, he says, "dadurch dass ich die Zeit selbst in der Apprehension der Anschauung erzeuge". But in counting six I do not make a synthesis of time any more than in the logical process of drawing a conclusion from premisses; though in each case the process no doubt occupies time. The parts of the number six, when conceived abstractly, are surely conceived as simultaneous, not successive: and whatever they are they are certainly not units of time.[1] But again: when we consider the schema of quantity in connexion with the principle based upon it, that "all intuitions are extensive quantities," we see that just as the transition from indefinite to definite plurality was ignored in Kant's account of the relation of the category to the schema, so here another important difference, that between discrete and continuous quantity, is unduly slurred over. I cannot say that Kant ignores it altogether: he certainly does mention it, as it were accidentally, in the course of a subsequent discussion of *intensive* quantity. But in all that he says of the extensive quantities or "homogeneous manifolds" of intuition, he does not hint that such quantities are continuous and not discrete; nor that some of the most familiar relations among them—as that between the circle and its radius—are incapable of being adequately represented

[1] I do not mean to say that Kant identifies the units of number with units of time: he is of course perfectly aware that the parts of time must be extended quantities. But I think that in his desire to work out his system symmetrically he goes as near this identification as he can without committing himself to a manifest error: when he says that "Arithmetik bringt ihre Zahlbegriffe durch successive Hinzusetzung der Einheiten in der Zeit zu Stande" (*Prolegom.*, § 10).

by the relations of definite numbers. If the ignoring of this distinction were merely a negative defect, it might be hypercritical to lay stress upon it; but it has, I conceive, helped to lead Kant into a positive misstatement. He says[1] that an extensive quantity is one in which the "Vorstellung" of the parts makes the "Vorstellung" of the whole possible, and therefore necessarily precedes it. Now if such quantities were discrete and consisted of a finite number of units, this might be said; but I do not see how it can be said of an extended quantum which is necessarily conceived as continuous and divisible without limit. Surely there is a serious error—which Kant's dialectical acumen would have been sure to note in any other writer—in the statement that in thinking any portion of time I think a successive progress "wo durch alle Zeittheile und deren Hinzuthun endlich eine bestimmte Zeitgrösse erzeugt wird"; so far as it implies, as it certainly seems to imply, that a definite consciousness of the parts precedes the consciousness of the whole. For, of however many parts we may be definitely conscious in forming the notion of a given time or line, as all these parts are themselves extended quantities, they must be conceived as in their turn divisible into other parts of which the definite consciousness has *not* preceded.

I have laid stress on this misstatement, because it seems to me a good illustration of the incorrectness of Kant's general assumption that the understanding "cannot separate what it has not previously bound together," in its application to phenomena. In my view the essential function of thought, in all its departments, is not primarily or mainly the binding together of isolated elements into a whole; but a process by which we pass from the consciousness of some vague manifold, the elements of which are (1) obscurely thought or even (2) have a merely potential existence, to a consciousness of the same manifold as not only more connected, but more distinct in its parts, and not only more distinct but fuller. Now in other parts of Kant's treatise he seems to me to recognise at least implicitly both effects of this process: thus in his account of analytical judgments ('Einleitung,' § iv., p. 40) he expressly notes the progress from obscurity to distinctness in the elements of a conception: and in his discussion of the 'Transcendental Ideal' he seems at least to suggest the progress from potential to actual fulness in our notions of individual objects. But in the 'Transcendental Analytic' he views the function of the Understanding as *merely* one of

[1] 'Axiomen d. Anschauung,' p. 156.

synthesis of what is given as separate, and accordingly falls, in the region of mathematics, into the manifest error just noticed.

I hold, therefore, that no support can be derived for Kant's general theory of Schemata from his application of it to the particular case of Quantity. But if the schematism of Quantity breaks down, that of Quality fares, I must say, much worse. I remember that an old commentator of Leibniz, when he comes to the *Monadology*, cannot refrain from suggesting that his author's real aim must have been to try "quousque tandem pergeret bruta hominum assentiendi humilitas". No one would think of attributing such a motive, even in jest, to the earnest and candid Kant; but I do not find in this part of his reasoning the patient ingenuity which rarely deserts him even when he is most astray from truth; and it seems to me to require a "bruta assentiendi humilitas" to accept it as a cogent establishment of the relation which he declares to exist between the (logical) quality of a judgment and the intensive quantity of a phenomenon.

He begins by affirming dogmatically that "reality is that in the object which corresponds to feeling . . . the transcendental matter of all objects". The statement appears to me surprising, and inconsistent with language used by Kant elsewhere. I do not understand why reality should be thus equated to matter alone, instead of form and matter combined. I should have thought that, though space and time were not real in abstraction, they were at any rate real as elements of formed phenomena: and I should have thought that Kant distinctly held this view, since he repeatedly asserts that in his system space and time have "empirical reality" —and it is with empirical reality that he is here concerned. But, suppose this proposition granted, I should have thought that the schema of the category of Reality was thus obtained: that the categories of Reality and Negation, in their application to phenomena, would be interpreted as representing the presence and absence respectively of Feeling, regarded as the content of Time. This, however, would not suit Kant's purposes; as he is desirous of connecting his schema with the principle that "the real in all phenomena has intensive quantity," and is capable of continuous diminution down to zero; and hence he lays down that the schema of a reality is the "continuous and uniform production of it in time". Now here again I wish to make clear that I am not raising any question as to the truth or falsehood of the above-mentioned proposition—or rather propositions, since

there are two which do not necessarily involve each other: I am only unable to understand the grounds on which Kant claims acceptance for them. They obviously cannot be generalisations from experience; and it seems absurd to say that they can follow necessarily from the application of the categories of Reality and Negation to the content of Time. For there is nothing more evident about the logical antithesis of affirmation and negation, when abstractly contemplated, than its absoluteness, and the apparent absence of any possible mediation or transition between the two terms. It presents itself as the simplest form, the purest essence, of all antithesis: that a thing must either be or not be is one of the fundamental "laws of thought" in the logical tradition. No doubt, in the physical world we find continuous transition everywhere; which constitutes a serious difficulty in applying to nature the results of logical analysis and division. But this *primâ facie* unadaptedness of logic to fact Kant does not in any way overcome: he simply *jumps* from the one to the other by the aid of an unwarranted dogma that "every feeling has a degree or quantity by which it can fill the same time more or less till it vanishes into nothing"—a dogma which is, in fact, substantially the principle itself that is afterwards supposed to be proved by it.

Not less remarkable is the deduction which Kant makes from his principle of the 'Anticipations of Perception': *viz.*, that we cannot have experience of a vacuum. We are first told that reality corresponds to feeling, and negation to absence of feeling; and the possible continuous diminution of the real down to zero is inferred as corresponding to a similar diminution of feeling. But then we suddenly find that we somehow know *a priori* that "every sense *must* have a definite degree of receptivity," and accordingly that below the point at which any kind of sensation stops—below what we may call the sensible zero—the transcendental matter corresponding to such sensation must be still conceived as possibly existing, in any one of an indefinite number of continually diminishing degrees. Thus "we see that experience can never supply a proof of empty space or empty time, because the total absence of reality in a sensuous intuition can never be perceived, neither can it be deduced from any single phenomenon, and from the difference of degree in their reality; nor ought it ever to be admitted in explanation of them": and thus the schematism of the category of Negation seems to end by demonstrating its strict inapplicability to phenomenal reality.

I hardly know where to begin to criticise this singular

argument. (1) If the matter of all phenomenal objects consists of mere modifications of our sensibility, how can we consistently suppose a phenomenal object to exist corresponding to modifications which, by the very nature of our sensibility, cannot possibly occur? And (2), if we could suppose this, by what transcendental intuition do we know that our senses *must* be incapable of perceiving phenomenal reality below a certain degree? And (3), even granting that we must suppose as possibly existent a phenomenon that cannot possibly appear, and therefore that we can never have direct experience of void space and time, it still is not clear why the assumption of such a void can never be admitted as an explanation of phenomenon: for, granting that an apparent void cannot be known to be real, it does not surely follow that it must be known to be merely apparent. And, finally, it seems to me that this corollary from the 'Anticipations of Perception' must land us in serious difficulties when we try to make it consistent with Kant's express interpretation of the first 'Analogy of Experience'—to the discussion of which I will now proceed.

The schematism of the categories of Relation—at any rate of the first two pairs—and the establishment of the corresponding *a priori* principles form a part of Kant's doctrine which has, on various grounds, more interest for most students than what has just been discussed. For, first, the principles in question are propositions which we commonly regard as requiring some kind of proof, whereas the 'Axioms of Intuition' would commonly be thought to be self-evident: secondly, the proof that Kant offers in each case, is one that does not seem to need as a basis Kant's general doctrine as to the relation of the understanding and its categories to time and the schemata; it would remain to be dealt with on its merits even if that general doctrine were abandoned as untenable; while at the same time, as was before said, the relation of the categories to time-determinations does not here appear to be so forced and artificial as it does in the case of the other categories. The relation of logical Subject to its Predicates is clearly analogous in some way to the relation of phenomenal Substance to its Accidents: substance, again, is conceived as remaining permanent while its accidents change: so that it is at any rate a plausible view that the schema of the category of subject—that in phenomena which may be known *a priori* to be cogitable only as subject and not as predicate—is the permanent. There are, however, two objections to the doctrine. In the first place we can obviously apply, and do

in ordinary thought apply, the category of subject to other elements of experience or consciousness besides the permanent matter that we conceive as underlying phenomenal change: all *cognita* whatever—not merely accidents as well as substances, but the merely subjective feelings which Kant distinguishes from the objective characteristics of phenomenal objects, must be made subjects of predication when our knowledge respecting them is made explicit: hence there does not seem to be any reason why we should also find for the category a special application to something that *cannot* be thought as predicate. And secondly, so far as we conceive the permanent substance as something that possesses equally permanent attributes, the distinction of subject and predicate is inevitably reintroduced *within* this notion of substance which is put forward as corresponding to subject only. And Kant, of course, does conceive his substance as having the attribute of quantity, which remains as unchanged as the substance: his first 'Analogy of Experience' expressly states "that the *quantum* of substance in nature is neither increased nor diminished".

Let us now consider the transcendental proof which Kant offers of this principle—which may, as I have said, be taken quite independently of the doctrine of the categories and their schematism. The proof is briefly this. All phenomena exist in Time, which does not itself change, all change having to be thought in it. As Time "für sich" cannot be perceived, there must be in objects something to represent time, unchanging and of which all change can only be thought as a determination. This is Substance: as it cannot change, its quantum cannot be decreased or increased.

Now, first, it does not seem to me true—that is, not truly to represent our common thought as expressed in our common language—to say in this absolute way that "Time does not change". I should say that change and permanence, succession and duration are inextricably combined in our notion of time, so that it is as true to say "Time *passes*" as that Time abides. However, I will not dwell on this point, as I am quite prepared to admit that I cannot conceive change without the conception of somewhat that remains unchanged besides Time. But I see no reason why this somewhat should necessarily be conceived as permanently unchangeable. For instance: suppose a manifold is presented consisting of elements which we may represent by the four letters *abcd:* it appears to me that I can perfectly well conceive the four elements changing one after another so that ultimately an entirely new manifold $a_1b_1c_1d_1$ should be

found to have substituted itself for *abcd;* provided that, while *a* is changing into a_1, *bcd* remains unchanged, and so on for each of the four elements.

Perhaps it may be said that this presentation of coexistent elements is not really possible, because "our apprehension is always successive"; or, as Kant states it more definitely in the 'Deduction of the Categories' in his first edition, "as contained in one moment, each *Vorstellung* can never be anything but absolute unity". I just note that we have here another of those strange dogmas of Transcendental Psychology which Kant can neither consistently support by an appeal to an experience nor claim to know *a priori:* and I remark further that this particular dogma is altogether contrary to my own experience, so far as I can know it by reflection; since I am continually conscious of an apparently presented manifold of quite simultaneous sensations and sense-perceptions. But even if it were granted that "apprehension," strictly speaking, is always serial; I do not see how Kant can deny that I can have a simultaneous manifold in my consciousness somehow, whether it be strictly presented or partially represented; and this is all that I require for the purposes of the above argument.

The notion, then, of an absolutely permanent substance does not appear to me to be necessarily involved in the notion of change, as Kant argues: and I do not see that he gives any other cogent reason for affirming *a priori* the existence of such a substance in nature. There are, moreover, other difficulties in the way of accepting his account of the notion. The language in which he introduces it seems to imply that substance can itself be perceived; since the necessity of finding it in the objects of perception is expressly stated to follow from the fact that "die Zeit für sich" cannot be perceived, and the consequence would seem to fail if Substance also was incapable of being "für sich wahrgenommen". Yet, whatever precise meaning we give to the words last quoted, it is hard to see how the characteristic they express can be attributed to Substance, as Kant conceives it—"the substratum of all the real"—any more than to Time. Then, again, what kind of quantity is it that is attributed to substance? Kant has distinguished two kinds of quantity, extensive and intensive: does he mean to attribute both, or if not, which of the two? There seems no doubt that he conceives his Substance as extended in space, as he identifies it with the Matter of which physicists assume the permanence. It remains, therefore, to ask whether the parts of this extended substance differ in their intensive

quantity or not. He has already, in discussing the 'Anticipations of Perception' rejected the assumption that "das Reale im Raume allerwärts einerlei sei": hence we must suppose that the parts of his Substance have different intensive quantities. But thus his Substance turns out to be an aggregate of heterogeneous substances: and yet, as the ground for assuming its existence was that we might have something to represent, in Mr. Caird's words, the "unity or self-identity of time itself," this heterogeneity is surely a very singular and inappropriate characteristic.

Here I must conclude. The category of Causality, which I refrain from touching, is perhaps the most interesting of all: on the other hand, the amount of discussion—in the English language—which has recently been bestowed on this is so disproportionately large, that I shrink from adding anything to it, if it be not absolutely necessary. The tree is known by its fruits, but it is hardly needful to dissect them all; and I conceive that I have already examined the particulars of Kant's system sufficiently to support my general objections to his method. In conclusion, I will only say that my objections are not urged from the point of view either of Empiricism or of the Common-sense Philosophy. I do not hold either that our common *a priori* assumptions respecting empirical objects require no philosophical justification, or that verification by particular experiences is the only justification possible. But I see no ground for expecting to get anything better by the method which Kant has miscalled 'Criticism'. This, as I have tried to show, is as dogmatic—in the worst sense of the term—as that of any preceding metaphysician: and I do not see that we are likely to gain by exchanging the natural and naïve dogmas of the older "transcendent" ontology, for the more artificial and obscure, but no less unwarranted, dogmas of this newer "transcendental" psychology.

H. Sidgwick.

II.—MAIMONIDES AND SPINOZA.

Prof. Schaarschmidt in his excellent preface to Spinoza's *Korte Verhandeling van God, &c.* (Amsterdam, 1869), has drawn attention to the somewhat one-sided view usually taken of Spinoza's position in the evolution of thought: the importance attributed to the influence of Descartes and the slight weight given to the Jewish writers. He concludes his considerations with the remark:—"Attamen in gravissimis rebus ab eo (Cartesio) differt et his ipsis cum Judæorum philosophia congruit, quorum quidem orthodoxiam repudiavit, ingenium ipsum et mentem retinuit." (Præfatio xxiv.)

The subject is all the more important because even an historian like Kuno Fischer (*Gesch. der neuern Philos.*, 3rd ed., 1880) still regards Spinoza as a mere link after Descartes in the chain of philosophical development, rejecting the view that he belongs rather to Jewish than Christian Philosophy. The hypothesis that Spinoza was very slightly influenced by Hebrew thought has become traditional and is to be found in the most recent English works on Spinoza. Mr. Pollock writes that the influence of Maimonides on the pure philosophy of Spinoza was comparatively slight (p. 94). Dr. Martineau tells us somewhat dogmatically that "no stress can be laid on the evidence of Spinoza's indebtedness to Rabbinical philosophy" (p. 56). These opinions seem in part based on a perusal of Maimonides's *More Nebuchim* and of Joël's *Zur Genesis der Lehre Spinozas* (1871), taken in conjunction with Mr. W. R. Sorley's "Jewish Mediæval Philosophy and Spinoza" in MIND XIX. Neither Mr. Pollock nor Dr. Martineau seems acquainted with Maimonides's *Yad Hachazakah*. It is to the relation of this work to Spinoza's *Ethica* that I wish at present to refer.[1]

Maimonides (1135-1204) completed his *More Nebuchim* about 1190, its aim being to explain on the ground of reason the many obscure passages of Scripture and apparently irrational rites instituted by Moses. Hence the book was termed the "Guide of the Perplexed," being intended to lighten the difficult path of Biblical study. As might easily

[1] While on the subject of works concerning Spinoza and Jewish Philosophy I may give the following titles:—E. Saisset, "Maimonide et Spinoza," *Revue des deux Mondes*, 1862; Salomo Rubinus, *Spinoza und Maimonides*, Vienna, 1868.

be supposed it is only concerned in the second place with philosophical ethics. The influence of such a book on Spinoza is, as might be expected, most manifest in the *Tractatus Theologico-Politicus.* The *Yad Hachazakah*, however, or the "Mighty Hand," written some ten years previously, has far greater importance for the student of Spinoza's *Ethica.* Its author originally termed it "The Twofold Law," *i.e.*, the written and traditional law—Bible and Talmud,—and under 14 headings or books considered some of the most important problems in theology and ethics. Portions of the *Yad* were in 1832 translated by Herman Hedwig Bernard and published in Cambridge under the title :—*The Main Principles of the Creed and Ethics of the Jews exhibited in selections from the Yad Hachazakah of Maimonides.* Of this book I propose to make use in the following remarks on the thought-resemblance between Spinoza and Maimonides.[1] I shall omit all matter which has not direct bearing on Spinoza's *Ethica*, however interesting it may otherwise be, and endeavour to make allowance for the age and theologico-philosophical language in which Maimonides wrote. We have rather to consider the spirit in which Spinoza read the *Yad* than that in which it was composed.

[1] Two other translations of the First Book of the *Yad* may be mentioned, both "edited" by the Polish Rabbi, Elias Soloweyczik. The first —into German (Königsberg, 1846)—omits the last or fifth part of the First Book containing: "The Precepts of Repentance". The second—into English (Nicholson, 1863)—nominally contains all five parts, but really omits many of their most interesting sub-chapters (*e.g.*, Part III., c. v.-vii., on the relation of a scholar to his teacher and on respect for the wise). This English edition too loses much of its scientific value owing to the omission or perversion of many paragraphs where the editor has with a very false modesty thought Maimonides too outspoken for modern readers. On the title-page stand the words: "Translated from the Hebrew into English by several Learned Writers." The chief of these "Learned Writers" is Bernard, who has been freely used without apparent acknowledgment. Portions of the remainder appear to be translated from the German and not directly from the Hebrew. Appended to this English Edition is a translation of the 5th Chapter of Book xiv. of the *Yad:* or "Laws concerning Kings and their Wars". Whatever may have been the causes which gave rise to this so-called English translation, it must be noted that Soloweyczik's German translation is an independent work, suffering from none of these faults and of considerable value to the student of Maimonides.

Before entering upon a comparison of the intellectual relation of Maimonides to Spinoza, I may refer to a close connexion between Spinoza's method of life and Maimonides's theory of how a wise man should earn his livelihood. It seems to me the key-note of Spinoza's life by the optical bench,—his refusal of the professorial chair. "Let," writes Maimonides, "thy fixed occupation be the study of the Law" (*i.e.*, divine wisdom) "and thy worldly pursuits be of secondary consideration." After stating that

Let us first of all consider Maimonides's conception of God. This is contained in the "Precepts relating to the Foundations of the Law," and the "Precepts relating to Repentance," especially in the chapters entitled by Bernard "On the Deity and the Angels" (p. 71) and "On the Love of God and the true way of serving Him" (p. 314), which correspond roughly to *Ethica* i. and v. of Spinoza. Maimonides, to start with, sweeps away all human attributes and affections from the Godhead. God has neither body nor frame, nor *limit* of any kind; He has none of the accidental qualities of bodies—"neither composition nor decomposition; neither place nor measure; neither ascent nor descent; neither right nor left; neither before nor behind; neither sitting nor standing; neither does he exist in time, so that he should have a beginning or an end or a number of years; nor is he liable to change, since in Him there is nothing which can cause a change in Him." (B. 78.) Add to this, God is *one*, but this unity is not that of an *individual* or a material body "but such an One that there is no other Unity like His in the Universe." (B. 73.) That God has similitude or form in the Scripture is due only to an "apparition of prophecy"; while the assertion that God created man in His own image refers only to the soul or intellectual element in man. It has no reference to *shape* or to manner of life but to that knowledge which constitutes the "quality" of the soul. (B. 106.) The "pillar of wisdom" is to know that this first Being exists, and "that He has called all other beings into existence, and that all things existing, heaven, earth and whatever is between them, exist only through the truth of His existence, so that if we were to suppose that He did not exist, no other thing could exist." (B. 71.) Among the propositions which Spinoza in the Appendix to *Ethica* i., tells us that he has sought to prove are, that God exists necessarily:—"quod sit unicus; —quod sit omnium rerum causa libera, et quomodo; quod

all business is only a means to study, in that it provides the necessities of life, he continues: "He who resolves upon occupying himself solely with the study of the Law, not attending to any work or trade but living on charity, defiles the sacred name and heaps up contumely upon the Law. Study must have active labour joined with it, or it is worthless, produces sin, and leads the man to injure his neighbour." . . . "It is a cardinal virtue to live by the work of one's hands and it is one of the great characteristics of the pious of yore, even that whereby one attains to all respect and felicity of this and the future world." (After *Soloweyczik*, Part III., Chap. iii., 5-11). Why does Spinoza's life stand in such contrast to that of all other modern philosophers? Because his life at least, if not his philosophy, was Hebrew!

omnia in Deo sint, et ab ipso ita pendeant, ut sine ipso nec esse nec concipi possint"—words which might almost stand as a translation of Maimonides. *Cf.* also *Ethica* i. 14 and Corollary, and 15.

That God is not divisible (B. 73) Spinoza proves, i. 13; that He is without limit, i. 19 or better, *Principia Cartesii* 19; that God is incapable of change, i. 20, Coroll. 2; the notion that God has body or form is termed a "childish fancy," i. 15, Scholium; while the infinite and eternal nature of God is asserted at the very commencement of the *Ethica*. Add to this that Maimonides's conception of the Deity, without being professedly pantheistic, is yet extremely anti-personal and diffused. Still more striking is the coincidence when we turn to the denial of human affections: Maimonides tells us that with God "there is neither death nor life like the life of a living body; neither folly nor wisdom, like the wisdom of a wise man; neither sleep nor waking; neither anger nor laughter; *neither joy nor sorrow*; neither silence nor speech, like the speech of the sons of men". (B. 79.) Compare with this Spinoza's assertions that the intellect of God differs *toto cœlo* from human intellect (i. 17, Schol.) and that "God is without passions and is not affected by any emotion *of joy or sorrow*"—"He neither loves nor hates anyone" (v. 17 and Coroll.).

Curiously enough, while both Maimonides and Spinoza strip God of all conceivable human characteristics, they yet hold it possible for the mind of man to attain to some, if an imperfect, *knowledge* of God, and make the attainment of such knowledge the highest good of life. There would be some danger of self-contradiction in this matter, if their conception of the Deity had not ceased to be a personal one, and become rather the recognition of an intellectual cause or law running through all phenomena—which, showing beneath a material succession an intellectual sequence or mental necessity, is for them the Highest Wisdom, to be acquainted with which becomes the end of human life. This intellectual relation of man to God forms an all-important feature in the ethics of both Maimonides and Spinoza; it is in fact a vein of mystic gold which runs through the great mass of Hebrew thought.[1]

[1] The Talmudic picture of the world to come where "the righteous sit with their crowns on their heads delighting in the shining glory of the Shechinah" is thus interpreted: their crowns denote intelligence or wisdom, while "delighting in the glory of the Shechinah" signifies that they know more of the truth of God than while in this dark and abject body. The attainment of wisdom as the self-sufficient end of life is one of the

Before entering upon Maimonides's conception of the relation of God to man, it may be as well to premise what he understands by *intelligence*. The Rabbinical writers oppose the term *quality* or *property* to the term *matter* (B. Note p. 82); most frequently, and in the *Yad* invariably, when the two terms are opposed, the former signifies intelligence or thought; so that in the language of Spinoza we may very well term them *thought* and *extension*. If we leave out of account the angels, to whom Maimonides rather on doctrinal and theological than on philosophical grounds assigned an anomalous position, we find that all things in the universe are composed of matter and quality (*i.e.*, extension and thought) though possessing these attributes in different degrees. These degrees form the basis of all classification and individuality. (B. 82-84.) We now arrive at a proposition which may be said to form the very foundation of Spinoza's *Ethica*: "You can never see matter without quality, nor quality without matter, and it is only the understanding of man which abstractedly parts the existing body and knows that it is composed of matter and quality". (B. 105.) This coexistence of matter and quality or extension and thought is carried even, as in Spinoza's case, throughout all being. Even "all the planets and orbs are beings possessed of soul, mind and understanding". (B. 97.) Spinoza in the Scholium to *Ethica* ii. 13, remarking on the union of thought and extension in man continues—"nam ea, quae hucusque ostendimus, admodum communia sunt, nec magis ad homines quam *ad reliqua Individua pertinent*, quae omnia, *quamvis diversis gradibus*, animata tamen sunt". The parallelism is all the more striking in that in this very Scholium a classification is suggested based on the *degrees* wherein the two attributes are present in individuals. Dr. Martineau, in a note on this passage (p. 190), remarks on a superficial resemblance between Giordano Bruno and Spinoza: "Bruno animates things to get them into action; Spinoza to fetch them into the sphere of *intelligence*." It will be seen at once how Spinoza coincides on this point with Maimonides, who wished to explain how it is that all things in their degree know the wisdom of the Creator and glorify Him. Each intelligence, according to the latter philosopher, in its degree can know God; yet none know

highest and most emphasised lessons of the Talmud and its commentators. The strong reaction against a merely formal knowledge at the beginning of our era led the founder of Christianity and his earlier followers to a somewhat one-sided view of life which neglected this all-important truth.

God as he knows himself. From this it follows that the measure of man's knowledge of God is his intelligence. With regard to this intelligence it may be remarked that Maimonides identifies it—that "more excellent knowledge which is found in the soul of man"—with the "quality" of man, *i.e.*, his thought-attribute, and that this "quality" of man is for him identical with the soul itself. (B. 105.) The bearing of all this on Spinoza's theosophical conceptions must be apparent; yet this is but a stage to a far more important coincidence—the principle, namely, that the *knowledge of God is associated always in an equal degree with the love of God:* what Spinoza has termed the "*Amor Dei intellectualis*". Understanding the work of God is "an opening to the *intelligent* man to love God," writes Maimonides. (B. 82.) Further, "a man however can love the Holy One, blessed be He! only by the knowledge which he has of Him; so that his love will be in proportion to his knowledge; if this latter be slight the former will also be slight; but if the latter be great the former also will be great. And therefore a man ought solely and entirely to devote himself to the acquisition of knowledge and understanding, by applying to those sciences and doctrines which are calculated to give such an idea of his Creator as it is in the power of the intellect of man to conceive." (B. 321.) This intellectual love of God is for Maimonides the highest good; the bliss of the world to come will consist in the knowledge of the truth of the Shechinah; the greatest worldly happiness is to have time and opportunity to learn wisdom (*i.e.*, knowledge of God), and this maximum of earthly peace will be reached when the Messiah comes, whose government will give the required opportunities. (B. 308, 311, &c.) Furthermore, the intensity of this intellectual love of God, this pursuit of wisdom, is insisted upon: the whole soul of the man must be absorbed in it—"it cannot be made fast in the heart of a man unless he be constantly and duly absorbed in the same and unless he renounce everything in the world except this love". (B. 320.) It will be seen at once how closely this approaches Spinoza's "Ex his clare intelligimus, qua in re nostra salus, seu Beatitudo, seu Libertas consistat; nempe in constanti et aeterno erga Deum Amore" (v. 36, Schol.), and "Hic erga Deum Amor summum bonum est, quod ex dictamine Rationis appetere possumus" (v. 20). Spinoza's "third kind of intellection," his knowledge of God, is associated with the renunciation of all worldly passions, all temporal strivings and fleshly appetites; it is the replacing of the

obscure by clear ideas, the seeing things under the aspect of eternity,—in their relation to God. There is in fact in Spinoza's system a strong notion of a 'renunciation' or 're-birth,' by means of which a man becomes *free*, thenceforth to be led "by the spirit of Christ, that is *by the idea of God* which alone is capable of making man free" (iv. 68, Schol.). This notion of re-birth or renunciation has very characteristic analogues in the 'Nirvana' of Buddha and the 'Ewige *Geburt*' of Meister Eckhart. It is, however, peculiarly strong in the theosophy of Maimonides. Having called to mind that contemplation of the highest truths of the Godhead has been figuratively termed by Rabbinical writers, "walking in the garden," I proceed to quote the *Yad*:—

"The man who is replete with such virtues and whose bodily constitution too is in a perfect state on his entering into the garden and on his being carried away by those great and extensive matters, if he have a correct knowledge so as to understand and comprehend them—if he continue to keep himself in holiness—*if he depart from the general manner of people, who walk in the darkness of temporary things*—if he continue to be solicitous about himself, and to train his mind so that it should *not think at all of any of those perishable things, or of the vanities of time and its devices*, but should have its thoughts constantly turned on high, and fastened to the Throne so as to comprehend those holy and pure intelligences and to meditate on the wisdom of the Holy One . . . and if by these means he come to know His excellency—*then the Holy Spirit immediately dwells with him;* and at the time when the spirit rests on him, his soul mixes with the degree of those angels called Ishim, so that he is changed into another man. Moreover he himself perceives from the state of his knowledge that he is not as he was." (B. 112.)

Separate the notions of this paragraph from their Talmudic language and they contain almost the exact thoughts of Spinoza—the passage from obscure to clear ideas and the consequent attainment to a knowledge of God. Maimonides's assertion that the man himself perceives that he has attained this higher knowledge is perfectly parallel with Spinoza's proposition, that the man who has a true idea is conscious that he has a true idea and cannot doubt its truth (ii. 43.) The parallel between this Mediæval Jewish Philosophy and Christian Theology is of course evident, and probably due to the fact that both had a common origin in Ancient Jewish Philosophy,—if the analogy of Buddhism does not point to a still wider foundation in human nature.

Still one point in the relation of God and man, wherein Maimonides and Spinoza follow the same groove of thought. With the former the "cleaving to the Shechinah," the striving after God, is identified with the pursuit of wisdom. This is in itself the highest bliss—the attainment of wis-

dom is as well the goal as the course of true human life; wisdom is not to be desired for an end beyond itself—for the sake of private advantage or from fear of evil, above all not owing to dread of future punishment or hope of future reward—but only in and for itself because it is truth, it is wisdom. Only "rude folk" are virtuous out of fear. (B. 314.) Spinoza expresses the same thought in somewhat different words: he tells us, that the man who is virtuous owing to fear does not act reasonably. The perfect state is not the reward or goal of virtue, but is identical with virtue itself. The perfect state is one wherein there is a clear knowledge and consequent intellectual love of God; and this is in itself an end and not a means (iv. 63 and v. 42, &c.).

We may now pass to a subject which, in the case of both philosophers, is beset with grave difficulties—namely, God's knowledge and love of himself. We have seen that in both systems the knowledge of God is always accompanied by a corresponding love of God; we should expect therefore to find God's knowledge of himself accompanied by a love of himself. This inference, however, as to God's intellectual love of himself seems only to have been drawn by Spinoza; Maimonides is, on the other hand, particularly busied with God's knowledge of himself. To begin with, we are told *that God because he knows himself knows everything.* This assertion is brought into close connexion with another:—all existing things from the first degree of intelligences to the smallest insect which may be found in the centre of the earth exist by the power of God's truth. (B. 87.) Some light will perhaps be cast on the meaning of these propositions by a remark previously made as to Maimonides's conception of the Deity as an intellectual cause or law. Behind the succession of material phenomena is a succession of ideas following logically the one on the other. This thought-logic is the only *form* wherein the mind can co-ordinate phenomena because it is itself a thinking entity, and so subject to the logic of thought. The 'pure thought' which has a logic of its own inner necessity is thus the cause, and an intellectual one, of all phenomena. That system which identifies this 'pure thought' with the godhead may be fitly termed an intellectual pantheism or a pantheistic idealism. It is obvious how in such a pantheistic idealism the propositions—that God in knowing himself knows everything; and that all things exist by the power of God's truth—can easily arise. Such a passage as the following too becomes replete with very deep truth:—"The Holy One . . .

perceives His own truth and knows it just as it really is. And he does *not know with a knowledge distinct from Himself* as we know; because we and our knowledge are not one; but . . . *His knowledge and His life are one* in every possible respect, and in every mode of unity; . . . Hence you may say *that He is the knower, the known and knowledge itself* all at once. . . . Therefore He does not perceive creatures and know them, by means of the creatures as we know them; but he knows them by means of Himself; so that, by dint of His knowing Himself, He knows everything; because everything is supported by its existing through Him." (B. 87.) What fruit such conceptions bore in the mind of Spinoza must be at once recognised by every student of the *Ethica*.

Let us compare these conceptions with their Spinozistic equivalents. "All things exist by the power of God's truth." To this *Ethica* i. 15 corresponds—"Quicquid est, in Deo est, et nihil sine Deo esse neque concipi potest."

"God in knowing himself knows everything." I am not aware of any passage in the *Ethica* where this proposition is distinctly stated, yet it follows immediately from Spinoza's fundamental principles, and is implied in i. 25, Schol. and Coroll., and elsewhere (ii. 3, &c.) It is of course involved in God's *infinite* intellectual love of himself. (v. 35).

"God does not know with a knowledge distinct from himself." "His knowledge and His life are one." "He is the knower, the known, and knowledge itself." "His perception differs from that of creatures." Compare the following statements of Spinoza. "Si intellectus ad divinam naturam pertinet, non poterit, uti noster intellectus, posterior (ut plerisque placet), vel simul naturâ esse cum rebus intellectis, quandoquidem Deus omnibus rebus prior est causalitate; sed contra veritas et formalis rerum essentia ideo talis est, quia talis in Dei intellectu existit objective. Quare Dei intellectus, quatenus Dei essentiam constituere concipitur est re vera causa rerum, tam earum essentiae quam earum existentiae" (i. 17, Schol.). These words are followed by the remark that this is the opinion of those "who hold the knowledge, will, and power of God to be identical," which probably refers to Maimonides. "Omnia quae sub intellectum infinitum cadere possunt necessario sequi debent" (i. 16.) "Sicuti ex necessitate divinae naturae sequitur, ut Deus seipsum intelligat, eadem etiam necessitate sequitur, ut Deus infinita infinitis modis agat. Deinde, i. 34, ostendimus Dei potentiam nihil esse, praeterquam Dei actuosam essentiam" (ii. 3, Schol.). Such expressions sufficiently show that God's

knowledge, *i.e.*, his "intellectus," and his action—*i.e.*, his life are one and the same. "Nam intellectus et voluntas, qui Dei essentiam constituerent, a nostro intellectu et voluntate toto cœlo differre deberent" (i. 17, Schol.). Which sufficiently marks the difference between the divine and human intellect. Shortly, although in certain formal assertions of the *Ethica* this view is somewhat obscured, yet I venture to suggest that the only consistent interpretation of Spinoza's system is summed up in the following words:—that the intellect of God is *all;* his thought is the existence of things; to be real is to exist in the divine thought; that very intellect is itself existence; it does not understand things like the creature-intellect because *it is them.*[1] This is almost the exact equivalent of Maimonides's proposition that God is "the knower, the known, and knowledge itself".

As a step from theology to anthropology we may compare the views of the two philosophers on the immortality of the soul. We have seen that Maimonides identifies the soul with the "quality," *i.e.*, the thought-attribute in man. This quality not being composed of material elements cannot be decomposed with them; it stands in no need of the breath of life, of the body, but it proceeds from God (the infinite intellect). This "quality" is not destroyed with the body, but continues to know and comprehend those intelligences that are distinct from all matter (*i.e.*, it no longer has knowledge of material things and therefore must lose all trace of its former individuality), and it lasts for ever and ever. (B. 106.) A certain crude resemblance to *Ethica*, v. 23 and Schol., will hardly be denied to this view of immortality; but a still closer link may be discovered in the question whether this immortality is shared by all men alike. From the above it would seem that for Maimonides this question must be answered in the affirmative, but when we come to examine his notion of future life we shall find this by no means the case. For him goodness and wisdom—wickedness and ignorance—are synonymous terms.[2] He classifies all beings from the supreme intelligence down to the smallest insect according to their wisdom, the degree of "quality" in them. The wise man who has renounced all clogging passions and received the Holy Spirit, is classed

[1] *Cf.* also Kuno Fischer's identification of Spinoza's Substance with Causality.

[2] Many passages might be quoted from the *Yad* to prove this. A somewhat similar though not quite identical distinction of good and evil occurs in the *More Nebuchim* (b. i., c. 1), where they are held equivalent to true and false respectively.

even with a peculiar rank of angel—"the man-angel". On the other hand, the fool, the evil man, may be in possession of no "quality" and therefore incapable of immortality. The future life of the soul of the wise is a purely *intellectual* one; it consists in that state of bliss which Spinoza would describe as perceiving things by the "third kind of intellection": it is perceiving more of the truth of God than was possible while in the dark and abject body; it is increased knowledge of the Shechinah; or again, to use Spinoza's words, a more perfect "Amor Dei intellectualis". (B. 296.) On the other hand, the reward of the evil man is, that his soul is cut off from this life; *it is that destruction after which there is no existence;* "the retribution which awaits the wicked consists in this, that they do not attain unto that life, but that they are cut off and die." (B. 294.) Shortly, Hell and Tophet are the destruction and end of all life; there is no immortality. I will only place for comparison by the side of this a portion of the very remarkable Scholium with which Spinoza concludes the *Ethica*:—"Ignarus enim, praeterquam a causis externis multis modis agitatur, nec unquam vera animi acquiescentia potitur, vivit praeterea sui et Dei et rerum quasi inscius, et simul ac pati desinit, *simul etiam esse desinit.* Cum contra sapiens, quatenus ut talis consideratur, vix animo movetur, sed sui et Dei et rerum aeterna quadam necessitate conscius, *nunquam esse desinit*, sed semper vera animi acquiescentia potitur". Obviously Spinoza recognised some form of immortality in the wise man, which the ignorant could not share; the one ceased, the other never could cease to be.[1]

The influence of Maimonides on Spinoza becomes far less obvious when we turn to his doctrine of the human affections. On the one hand, this is perhaps the most thought-out, finished portion of Spinoza's work; on the other hand,

[1] It is a curious fact that the *last* words of the *Ethica* are very closely related to a paragraph in the *last* chapter of the *More Nebuchim;* wherein we are told that it is knowledge of God only which gives immortality. The soul is only so far immortal as it possesses knowledge of God, *i.e.*, wisdom. To perceive things under their intelligible aspect is the great aim of every human individual, it gives him true perfection and renders his soul immortal. In striking correspondence with this is Chap. 23 of the 2nd Part of the *Korte Verhandeling van God, &c.* We are told that the soul can only continue to exist in so far as it is united to the body or God. (1) When it is united only to the body it must perish with the body. (2) In so far as it is united with an unchangeable object, it must in itself be unchangeable. That is in so far as it is united to God, it cannot perish. This "union with God" is what Spinoza afterwards termed the "knowledge of God". The coincidence has been noted by Joël *(Zur Genesis der Lehre Spinozas).*

Maimonides's somewhat crude "Precepts relating to the Government of the Temper," are an unsystematic mass of moral precepts, exegesis, and interpretation of the Talmud; added to which only certain portions are yet available in translation. Nevertheless, we may find several points of contact and even double contact.

According to Spinoza the great end of life—the bliss which is nothing less than repose of the soul—springs from the knowledge of God. The more perfect the intellect is, the greater is the knowledge of God. The great aim then of the reasoning man is to regulate all other impulses to the end that he may truly understand himself and his surroundings—that is, know God (iv. Appendix c. 4). All things, therefore, all passions, are to be made subservient to this one end—the attainment of wisdom. Following up this conception Spinoza proves that all external objects, all natural affections, are to be so treated or encouraged, that the body may be maintained in a state fit to discharge its functions, for by this means the mind will be best able to form conceptions of many things (iv. Appendix c. 27, taken in conjunction with iv. 38 and 39). For this reason laughter and jest are good in moderation; so also eating and drinking, &c.; music and games are all good so far as they serve this end; "quo majori Laetitia afficimur, eo ad majorem perfectionem transimus, hoc est, eo nos magis de *natura divina participare* necesse est" (iv. 45, Schol.) Nay, even marriage is consistent with reason, if the love arises not from externals only but has for its cause the "libertas animi" (iv. App., c. 20). Shortly, Spinoza makes the gratification of the so-called natural passions reasonable in so far as it tends to the health of the body, and hence to the great end of life—the perfecting of the understanding or the knowing of God. We may gather a somewhat similar idea from Maimonides. I have already pointed out that in the terminology of the latter's philosophy "to be wise," to "delight in the Shechinah" or "to serve the Lord" are synonymous. Remembering this, the following passage is very suggestive:—"He who lives according to rule, if his object be merely that of preserving his body and his limbs whole, or that of having children to do his work, and to toil for his wants—his is not the right way; but his object ought to be that of preserving his body whole and strong, to the end that his soul may be fit to know the Lord . . . it being impossible for him to become intelligent or to acquire wisdom by studying the sciences whilst he is hungry or ill, or whilst any one of his limbs is ailing. . . . And

consequently he who walks in this way all his days, will be serving the Lord continually even at the time when he trades, or even at the time when he has sexual intercourse; because his purpose in all this is to obtain that which is necessary for him to the end that his mind may be perfect to serve the Lord." (B. 174.) Elsewhere Maimonides tells us that a man should direct all his doings—trading, eating, drinking, marrying a wife—so that his body may be in perfect health and his mind thus capable of directing its energies to knowledge of God. (B. 172.)

Other points of coincidence may be noted. Spinoza attributes all evil to confused ideas, to ignorance. Maimonides states that desire for evil arises from an *infirm* soul (here it must be remembered that soul is the "quality" of a man, his thinking attribute). "Now what remedy is there for those that have infirm souls? *They shall go to the wise*, who are the physicians of soul." (B. 159.) Here evil is brought into close connexion with ignorance as its cause.[1] The characteristic of the wise man is that he avoids all opposite extremes, and takes that middle state which is found in all the dispositions of man; the rational man calculates his dispositions (*i.e.*, his affections or emotions) and directs the same "in the intermediate way to the end that he may preserve a perfect harmony in his bodily constitution." (B. 152.) There is an echo of this in Spinoza's "Cupiditas quae ex Ratione oritur, excessum habere nequit" (iv. 61). Maimonides holds haughtiness and humility extremes; the wise man will steer a middle course between them. (B. 154.) Spinoza tells us "Humilitas virtus non est, sive ex Ratione non oritur" (iv. 53). In the *Yad* we read, when a man is in a country where the inhabitants are wicked (*i.e.*, ignorant), "he ought to abide quite solitarily by himself." (B. 176.) In the *Ethica* :—"Homo liber, qui inter ignaros vivit, eorum, quantum potest beneficia declinare studet" (iv. 70). According to Spinoza all the emotions of hate, for example vengeance, can only arise from confused ideas, they have no existence for the rational man who

[1] It may be worth while remarking how the key-note to the moral Reformers who preceded the so-called Reformation is the conception that the wicked man and the fool are one and the same person. In woodcuts (*cf.* those in the *Narrenschiff*, 1494, and the recently discovered Block-book c. 1470) and in words (*cf.* Sebastian Brand, Geiler von Kaiserberg, and Thomas Murner) it is the ever-inculcated lesson. It is curious that this re-establishment of morality on a higher *intellectual* basis in preference to the old penal theory has ever—from Solomon to Spinoza—found such strong support in Hebrew Philosophy.

marks the true causes of things. Maimonides writes of vengeance that it shows an evil mind, "for with *intelligent* men all worldly concerns are but vain and idle things, such as are not enough to call forth vengeance." (B. 197.) Spinoza terms the passions obscure ideas (iii. Final paragraph), and in so far as the mind has obscure or inadequate ideas its power of acting or *existing* is decreased. Curiously enough Maimonides speaking of the passion anger says:— "passionate men cannot be said to live." (B. 164.)

Taken individually these coincidences might not be of much weight, yet taken in union I think they show that Spinoza was even in his doctrine of the human affections not uninfluenced by Maimonides; albeit to a lesser degree than in his theosophy.

It may not be uninteresting to note one point of divergence, namely, on the insoluble problem of free-will. Spinoza reduces man's free-will to an intellectual recognition of, and hence a free submission to, necessity. Maimonides on the other hand tells us distinctly that "free-will is granted to every man"; that there is no predestination; every man can choose whether he will be righteous or wicked, a wise man or a fool. (B. 263.) With regard to the question of God's pre-knowledge and whether this must not be a predestination, Maimonides writes: "Know ye that with regard to the discussion of this problem, the measure thereof is longer than the earth and broader than the sea". He hints, however, that its solution must probably be sought in the fact that God's knowledge is not distinct from himself, but that he and his knowledge are one ("the knower, the known and the knowledge itself are identical"). Maimonides cautiously adds that it is impossible for man fully to grasp the truth regarding the nature of God's knowledge; and, while granting God pre-knowledge, still concludes: "But yet it is known so as not to admit of any doubt that the actions of a man are in his own power and that the Holy One, blessed be He! neither attracts him nor decrees that he should do so and so." (B. 270.) Perhaps the ordinary work-a-day mortal will find Maimonides's evasion of the problem as useful as Spinoza's attempted solution!

In the above remarks I have considered only the *Yad Hachazakah*, because hitherto attention seems to have been entirely directed to the *More Nebuchim* (*cf.* Joël, Sorley and others). It is not impossible that in the intervening ten years Maimonides somewhat altered his views. I should not be surprised to hear that the *More* was held more 'orthodox' than the *Yad*. The latter, despite much Tal-

mudic verbiage and scriptural exegesis, notwithstanding many faults and inconsistencies, yet contains the germs of a truly grand philosophical system, quite capable of powerfully influencing the mind even of a Spinoza. Such a reader would, while rejecting the exegesis, recognise the elements of truth in the pure theosophy (*cf.* Joël, *Zur Genesis*, p. 9), and this is the point wherein the two philosophers approach most closely. In the second place, I have confined myself entirely to the influence of the *Yad* on the *Ethica*. Greater agreement would have been found with the *Korte Verhandeling van God, &c.*, while Spinoza's views of Biblical criticism (especially his conceptions of prophets and prophecy as developed in the *Tractatus Theologico-Politicus)* owe undoubtedly much to the *Yad*. Yet I wished to show that the study of Maimonides was traceable even in Spinoza's most finished exposition of his philosophy. Those who assert that Spinoza was influenced by Hebrew thought have not seldom been treated as though they were accusing Spinoza of a crime. Yet no great work ever sprung from the head of its creator like Athena from the head of Zeus; it has slowly developed within him, influenced and moulded by all that has influenced and moulded its shaper's own character. Had we but knowledge and critical insight enough, every idea might be traced to the germ from which it has developed. While recognising many other influences at work forming Spinoza's method of thought, it is only scientific to allow a certain place to the Jewish predecessors with whom he was acquainted. Critical comparison must show how great that influence was. We naturally expect to find considerable divergences between any individual Jewish philosopher and Spinoza; these divergences have been carefully pointed out by Mr. Sorley, but they are insufficient to prove that Spinoza was not very greatly influenced by Hebrew thought. My aim has been to call in question the traditional view of Spinoza's relation to Jewish philosophy, *i.e.*, that he learnt enough of it to throw it off entirely. I cannot help holding that, while Spinoza's form and language were a mixture of mediæval scholasticism and the Cartesian philosophy, yet the ideas which they clothed were not seldom Hebrew in their origin. He might be cast out by his co-religionists, but that could not deprive him of the mental birthright of his people—those deep moral and theosophical truths which have raised the Hebrews to a place hardly second to the Greeks in the history of thought.

Hebrew Philosophy seems to have a history and a de-

velopment more or less unique and apart from that of other nations; once in the course of many centuries it will produce a giant-thinker; one who, not satisfied by the narrow limits of his own nation, strives for a freer wider field of action, and grafts on to his Hebrew ideas a catholic language and a broader mental horizon. He becomes a world-prophet, but is rejected of his own folk. Such an one of a truth was Spinoza, and another perhaps, albeit in a lesser degree, Moses, the son of Maimon.[1]

KARL PEARSON.

[1] When the *More Nebuchim* became generally known, its author was looked upon by a large section of the Jews as a heretic of the worst type, who had "contaminated the religion of the Bible with the vile alloy of human reason"!

III.—MR. HERBERT SPENCER'S THEORY OF SOCIETY.

I. THE IDEAL STATE.

When in 1879 Mr. Herbert Spencer published his *Data of Ethics* in advance of the second and third volumes of his *Principles of Sociology*, he gave as reasons for thus departing from his philosophic programme his fear lest he should not be able to reach in its proper order the last part of the task which he had marked out for himself, and his unwillingness to leave altogether unfulfilled the purpose which ever since 1842, when he wrote his letters on *The Proper Sphere of Government*, had been his "ultimate purpose lying behind all proximate purposes," that, namely, of "finding for the principles of right and wrong in conduct at large a scientific basis".[1] All his many readers are glad in thinking that hitherto this fear has proved groundless, and now that *Ceremonial Institutions* and *Political Institutions* have been investigated, we may hope for the completion of that work on Morality of which the *Data of Ethics* forms but the introductory part. It may seem, therefore, that the present is not a well-chosen moment in which to criticise Mr. Spencer's ethical principles and method as apparent in his already published works, but it may possibly add to the interest with which we shall read any book or books that he may have in store for us if in the meantime we consider what he has led us to expect.

Not the least interesting fact about Mr. Spencer's conception of Ethics is that its chief outlines have remained unaltered for at least thirty years. While he has been maturing an idea of evolution of which but faint glimpses were granted to us in 1851, two cardinal doctrines have been undisturbed from first to last, or rather after every expedition into the material, moral or social world he has returned to his original theme with new faith, new proofs and illustrations. Scientific Ethics must still begin with a study of the relations which will exist between men in that ideal state of society to which we are tending. A law of equal liberty is still the main law, perhaps the only knowable law of those

[1] *Data of Ethics*, Preface.

relations. Mr. Spencer has indeed cautioned us[1] that *Social Statics* "must not be taken as a literal expression of his present views," and has given us certain more definite warnings concerning the qualifications with which it should be read, warnings to which it is hoped that due regard will be paid in what here follows; still Mr. Spencer "adheres to the leading principles set forth" in his early work, has found new arguments for them in his *Data of Ethics*, and has applied and defended them in many another book and essay. It would seem, therefore, to be our own fault if we fail to understand the general nature of that undertaking which lies before him in the last part of his task.

Out of the many passages in which Mr. Spencer has stated his general doctrine of ethical method, the following may be chosen as one of the most concise :—

"One who has followed the general argument thus far, will not deny that an ideal social being may be conceived as so constituted that his spontaneous activities are congruous with the conditions imposed by the social environment formed by other such beings. In many places, and in various ways, I have argued that conformably with the laws of evolution in general, and conformably with the laws of organisation in particular, there has been, and is, in progress an adaptation of humanity to the social state, changing it in the direction of such an ideal congruity. And the corollary before drawn and here repeated, is that the ultimate man is one in whom this process has gone so far as to produce a correspondence between all the promptings of his nature and all the requirements of his life as carried on in society. If so, it is a necessary implication that there exists an ideal code of conduct formulating the behaviour of the completely adapted man in the completely evolved society. Such a code is that here called Absolute Ethics as distinguished from Relative Ethics—a code the injunctions of which are alone to be considered as absolutely right in contrast with those that are relatively right or least wrong; and which, as a system of ideal conduct, is to serve as a standard for our guidance in solving, as well as we can, the problems of real conduct." [2]

Absolute Ethics stands to Relative Ethics, or Moral Therapeutics, in somewhat the same relation as that in which Physiology stands to Pathology.[3] We must have a science

[1] *Social Statics*, Preface to American edition of 1864, adopted in Preface to stereotyped edition of 1868.

[2] *Data of Ethics*, § 105.

[3] *Social Statics*, c. 1, § 3; *Data*, § 105.

of social and moral health, before we can have a science or an art which shall deal with social and moral disease. And moral health implies social health; the perfect man cannot exist in an imperfect society, nor the fully evolved man in a partially evolved society. To make any progress in ethical science we must conceive a "perfect," "normal," "ideal," "fully evolved" society. In the comparison thus instituted between Relative Ethics and Pathology, one who has had no "preparation in Biology" may fancy he detects some confusion between immaturity and disease, but it will be better for him not to meddle or make with these comparisons. In the *Social Statics* the doctrine seems clear enough that, in so far as an existing society differs from society as it will ultimately be constituted, it is diseased.[1] Whether Mr. Spencer would hold such language now may be doubted, but the theory that Absolute Ethics is a Physiology to which Relative Ethics is the corresponding Pathology is restated and defended in the *Data*.

Now Mr. Spencer differs from some other promoters of ideal commonwealths in this, namely, in believing that the natural and normal course of human progress tends towards the realisation of his ideal. Not that he thinks all movement progress, for he points out that there has been in some instances positive retrogression. There are backwaters in the stream of history, not to speak of stagnant pools. There is social dissolution as well as social evolution. Still social evolution is in some sense normal. There are always forces which are making for it, though they may be thwarted and neutralised. Indeed, it seems to be his present opinion that the ideal state contemplated by Absolute Ethics can never be quite attained, though we shall approach indefinitely or perhaps infinitely near to it, always provided that cosmic processes do not outrun the evolution of humanity, "reduce the substance of the earth to a gaseous state"[2] and end all things in the complete equilibration of universal and, it may be, eternal death.[3] I know of no formal proof that the ideal state contemplated by Absolute Ethics is necessarily beyond our attainment, but in *First Principles* this seems to be either assumed or implicitly proved both as to the balance between mankind and its environment and as to the balance between society and the individual. The former "can never indeed be absolutely reached," and the process which adapts individual to society and society to individual must go on until the balance

[1] Ch. 1, § 3. [2] *First Principles*, § 181. [3] *Ibid.*, § 182.

between the antagonistic forces approaches "indefinitely near perfection".[1] Perhaps there is something in the doctrine of rhythm as conceived by Mr. Spencer which forbids our hoping for more than this. At one time he took a more cheerful view, for we were told in *Social Statics* that all imperfection must disappear, that "the ultimate development of the ideal man is logically certain—as certain as any conclusion in which we place the most implicit faith; for instance, that all men will die". This Mr. Spencer formally proved as follows:—"All imperfection is unfitness to the conditions of existence. This unfitness must consist either in having a faculty or faculties in excess; or in having a faculty or faculties deficient; or in both. A faculty in excess is one which the conditions of existence do not afford full exercise to; and a faculty that is deficient is one from which the conditions of existence demand more than it can perform. But it is an essential principle of life that a faculty to which circumstances do not allow full exercise diminishes; and that a faculty on which circumstances make excessive demands increases. And so long as this excess and this deficiency continue, there must continue decrease on the one hand and growth on the other. Finally, all excess and all deficiency must disappear; that is, all unfitness must disappear; that is, all imperfection must disappear."[2] Where Mr. Spencer now finds the error in this plausible reasoning is not so plain as might be wished,—but certainly he is not now convinced by it.

In the *Data of Ethics* we are told that "however near to completeness the adaptation of human nature to the conditions of existence at large, physical and social, may become, it can never reach completeness".[3] And here what seem to be very serious limitations are set to the process of adaptation, so serious that the passage may perhaps betray some momentary "lack of faith in such further evolution of humanity as shall harmonise its nature with its conditions".[4] We learn that "in the private relations of men, opportunities for self-sacrifice prompted by sympathy, must ever in some degree, though eventually in a small degree, be afforded by accidents, diseases and misfortunes in general . . . Flood, fire and wreck must to the last yield at intervals opportunities for heroic acts."[5] Now poor unscientific Virgil painting his golden age got rid of the possibility of wreck by "omnis feret omnia tellus," a suggestion which betrays a want

[1] *First Principles*, § 175. [2] *Social Statics*, c. 2, § 4. [3] *Data*, § 96.
[4] *Data*, § 67. [5] *Data*, § 96.

of "preparation in Biology". Mr. Spencer, though he certainly does not regard the enterprises of industrialism as "priscæ vestigia fraudis," should, one would imagine, be ready to say that the fully evolved sailor, with body and mind perfectly adapted to all the rhythms of season and wind and wave, will think any talk of wreck no better than a pedantic allusion to the classics. But so long as we are subject to accidents, diseases and misfortunes in general, we have hardly come even "indefinitely near" the perfect state which allows no "scope for further mental culture and moral progress".

Were we here speculating as to the future of the human race it would become us to consider what are Mr. Spencer's reasons for setting to progress bounds which it shall not pass, and also to ask whether, if mankind is always to fall so very far short of adaptation to its environment as to continue permanently subject to flood, fire and wreck, accidents, diseases and misfortunes in general, there must not to the very last be at times a very wide divergence between the desires and aims of the individual and those of his neighbours. So long as we have not discovered all truth discoverable by man, so long as there is scope for further mental culture, there may well be danger lest some new discovery or invention should throw the social machine out of gear and introduce discordant notes into the pre-established harmony.

But here we are dealing with the ideal of Absolute Ethics, the fully-adapted man, the fully-evolved society. Nor have we plausible pretext for grumbling if Mr. Spencer will not allow us to be quite perfect. All tends towards the best in this only possible evolution. The life of man will be sociable, rich, nice, human, long, and not only long but broad. There will be the greatest totality of life, quantum of life being estimated "by multiplying its length into its breadth".[1] Industrialism will have supplanted militancy, the religion of enmity will be reconciled with the religion of amity, and egoism will lie down with altruism. Without further question, therefore, whether we are embarking under a Christopher Columbus who will make for a real concrete America hereafter to be peopled by an ingenious and thriving race, or under a Raphael Hythlodaye who steers for Utopia, we will suppose this ideal state made real and see what may be said of it.

In the first place, we must notice that in this state there

[1] *Data*, §§ 4, 8.

will not be any right or wrong in our sense of the words; certainly no wrong in any sense at all, and with us right seems to imply possibility of wrong. The four sanctions of morality will have become useless, and their existence will perhaps be pronounced essentially unthinkable. No religious sanction, for no fear of the supernatural; no legal sanction, for no command of earthly superiors; no social sanction, for society will never be displeased; no internal sanction, for no war in our members, no lusting of the flesh against the spirit, or the spirit against the flesh. If such words as *right*, *duty*, *ought* survive at all, they will survive as pretty archaisms of uncertain meaning. May not even the same be said of *liberty;* what meaning can it have when no one is ever tempted to interfere with his neighbour's desires? *Law* goes too, at least *law* in one of its meanings. When we say of these fully-evolved men that they will obey the law of equal liberty or any other law, we can only mean that they will obey in the sense in which matter is sometimes said to obey the law of gravity. In short, our ideal code is a code "formulating," not regulating, "the behaviour of the completely-adapted man in the completely-evolved society".

This, as I think, is Mr. Spencer's view of the ideal state. In the most interesting chapter of his *Data*, he has sought to show that not only the external sanctions of morality, theological, legal, social, but also the internal or specifically moral sanction are the accompaniments of imperfect evolution.[1] As we become better and better adapted to our environment, self-coercion, like every other form of coercion, tends to disappear. We are brought to the "conclusion, which will be to most very startling, that the sense of duty or moral obligation is transitory, and will diminish as fast as moralisation increases". "Evidently, then," we are told, "with complete adaptation to the social state, that element in the moral consciousness which is expressed by the word obligation, will disappear."[2] This is just what we should expect: the notion of obligation or duty disappears. But here as well as elsewhere Mr. Spencer can not be brought to say, perhaps would deny, that the ideal will ever be quite perfectly realised. "In their proper times and places and proportions, the moral sentiments will guide men just as spontaneously and adequately as now do the sensations. And though, joined with their regulating influence when this is called for, will exist latent ideas of the evils which nonconformity would bring, these will occupy the

[1] *Data*, c. 7. [2] *Data*, § 46.

mind no more than do ideas of the evils of starvation at the time when a healthy appetite is being satisfied by a meal."[1] . . . "With complete evolution, then, the sense of obligation, not ordinarily present in consciousness, will be awakened only on those extraordinary occasions that prompt breach of the laws otherwise spontaneously conformed to."[2] This, however, though for some reason or other it will be the last stage of human progress, is clearly not the ideal state, for further adaptation is conceivable. "Ideal congruity" is not yet realised. The ideal man must be adapted to "extraordinary occasions," as well as to ordinary occasions. The perfect man will never be prompted to break the law. The moral sentiments will lose their "regulating influence" over competing motives, and the "ideas of the evils which nonconformity would bring" having become latent must finally vanish. Whether absolute perfection be practically possible or no, whether or no there will always be some slight tremors and oscillations about the point of equilibrium, it must be with the perfectly-adapted man and the perfectly-adapted society that Absolute Ethics must deal. Obviously to accept as ideal anything short of absolute perfection would be to vitiate the whole procedure. "No conclusions can lay claim to absolute truth, but such as depend upon truths that are themselves absolute. Before there can be exactness in an inference, there must be exactness in the antecedent propositions. A geometrician requires that the straight lines with which he deals shall be veritably straight; and that his circles, and ellipses and parabolas shall agree with precise definitions—shall perfectly and invariably answer to specified equations. If you put to him a question in which these conditions are not complied with, he tells you that it cannot be answered. So likewise is it with the philosophical moralist. He treats solely of the *straight* man. He determines the properties of the straight man; describes how the straight man comports himself; shows in what relationship he stands to other straight men; shows how a community of straight men is constituted. Any deviation from strict rectitude he is obliged wholly to ignore. It cannot be admitted into his premisses without vitiating all his conclusions. A problem in which a *crooked* man forms one of the elements is insoluble by him."[3] The geometrician is not to be put off with slightly crooked lines because they are the straightest that can be made, nor can the moralist accept as straight a man

[1] *Data*, § 46. [2] *Data*, § 47.

[3] *Social Statics*, c. 1, § 3, cited and defended in *Data*, § 105.

who is on "extraordinary occasions" prompted to break the moral law.

This should be well understood, for Mr. Spencer not unfrequently sets before us a less remote ideal, a state through which we shall pass on the way to an ultimate goal, but not itself by any means the goal. There will be a time—we might call it the Silver Age—when society will still coerce the individual but only for a few purposes. There will still be laws in the lawyer's sense of the word, the individual will still be compelled to submit his will to the wills of others. But the sphere of political coercion will be much smaller than it at present is. To enforce the law of equal liberty, to protect life, limb, reputation, and property, to compel the performance of contracts, will still be the function of the state. Within this narrow sphere the coercive force will for a time be more active than it is at present. When Mr. Huxley labelled Mr. Spencer's political theory as "Administrative Nihilism"[1] the latter replied that what he desired was "Specialised Administration," and he has said that the phrase *laissez faire* does not fairly represent his opinions.[2] The state should give over meddling with many or most of those matters which are now thought proper subjects for coercive regulation and should concentrate its efforts on the provision of justice swift, cheap, foreknowable in accordance with the law of equal liberty. Political coercion should be specialised. Bentham himself has not spoken more strongly than Mr. Spencer of the ills which flow from our law's delay, and Mr. Spencer thinks that the remedy lies in concentrating upon the administration of justice those coercive governmental forces which are now dissipated in a thousand and one channels. But beyond this provisional paradise there lies the veritable land of promise. Perhaps the individual's "right to ignore the state" of which we read in *Social Statics*[3] will never be admitted as a right in our sense of the word, for the existence of a right seems to imply some probability or at least possibility of infringement, but the day will come when coercive co-operation will give way to voluntary co-operation, and no society will attempt to retain a member who wishes to be quit of it. Whether any particular type of voluntary society will be called a state, or a body politic, or the like, would seem to be a question barely about the future history of language, but membership of every social body will be terminable at the will of the

[1] *Critiques and Addresses*, I. [2] *Essays*, Third Series, v. [3] c. 19.

member, whose will, however, cannot but be consonant with the will of each of his fellows.

It is necessary to state this clearly, for in his *Data of Ethics* Mr. Spencer sometimes uses words which, if I have caught his meaning, might mislead an unwary reader. Thus a department of Ethics is marked off which "considering exclusively the effects of conduct on others, treats of the right regulation of it with a view to such effects".[1] This division of Ethics comprises the field of Justice. We then read as follows:—"This division of Ethics, considered under its absolute form, has to define the equitable relations among perfect individuals who limit one another's spheres of action by co-existing, and who achieve their ends by co-operation. It has to do much more than this. Beyond justice between man and man, justice between each man and the aggregate of men has to be dealt with by it. The relations between the individual and the state, considered as representing all individuals, have to be deduced—an important and a relatively-difficult matter. What is the ethical warrant for governmental authority? To what ends may it be legitimately exercised? How far may it rightly be carried? Up to what point is the citizen bound to recognise the collective decisions of other citizens, and beyond what point may he properly refuse to obey them?"[2]

This passage certainly starts in the key of Absolute Ethics; we are "among perfect individuals"; but seemingly at the mention of the state it passes into some Relative mode. If we are still dealing with perfect individuals, and the questions which we are asked are "relatively-difficult," the other questions of Ethics must indeed be superlatively easy. What is the ethical warrant for governmental authority? None; for no perfect individual will coerce his equally perfect neighbour. As to obedience and disobedience, the only doubt is which of these two words is the more inappropriate when we speak of the relations between fully-evolved men. Of course, therefore, these questions are questions of Relative Ethics; one of the factors they involve is the infliction of pain, and of this Absolute Ethics has nothing to say. "The law of absolute right can take no cognisance of pain, save the cognisance implied by negation."[3]

Again, in the "prospects" which Mr. Spencer takes at the end of each section of his *Sociology*, he seems to contemplate as the final condition of humanity a condition which

[1] *Data*, § 109. [2] *Ibid.*, § 109. [3] *Ibid.*, § 101.

neither he nor others would call absolutely perfect. Thus he raises the question—What is to be the ultimate political *régime*?[1] He thinks that it will not be the same in all communities, and then speculates as to the future of the British Constitution, and ends by saying that "neither these nor any other speculations concerning ultimate political forms can, however, be regarded as anything more than tentative". In the immediately preceding sentence he says that "municipal and kindred governments may be expected to exercise legislative and administrative powers subject to no greater control by the central government than is needful for the concord of the whole community". The age of ultimate political forms during which mayors and aldermen (in their ultimate form) exercise legislative powers under the control of the central government is not, I take it, the final epoch of equilibrium in which there will be no "scope for further mental culture and moral progress"; it is at best a penultimate age. So again, when "somewhat more definitely and with somewhat greater positiveness," Mr. Spencer infers the political functions which will be carried on by those ultimate political structures, and predicts that citizens whose natures have through many generations of voluntary co-operation and accompanying regard for one another's claims, been moulded into the appropriate form, will entirely agree to maintain such political institutions as may continue needful, and then mentions among such institutions "the agency for adjudicating in complex cases where the equitable course is not manifest, and for such legislative and administrative purposes as may prove needful for effecting an equitable division of all natural advantages"[2]—when Mr. Spencer speaks thus, he has not before him the ideal of Absolute Ethics, but some preparatory millenium during which adjudication and legislation will still be necessary. Adjudication implies conflict. So legislation also implies an imperfect adaptation of man to circumstances; for even if it be said that all the citizens will of their own free-will and without fear of punishment obey every law when made, the dilemma must yet be met: either the laws will bid them do only such things as they would have done if no laws had been made, or the laws will in some instances bid them do other things; in the former case the laws are futile; in the latter either the laws are pernicious, or the citizens are not yet perfect. In the ultimate state there will be no place for command, place only for counsel or advice, for arguments which will convince the

[1] *Political Institutions*, § 577. [2] *Ibid.*, § 579.

reason, not coerce the will of the citizen; and in this sense must be understood the saying that, "however great the degree of evolution reached by an industrial society, it cannot abolish the distinction between the superior and the inferior —the regulators and the regulated".[1] The final form of regulation is advice.

No one will blame Mr. Spencer for failing in his *Political Institutions* to describe that ideal state which is the subject-matter of Absolute Ethics. But even when in the *Data* he is dealing expressly with Absolute Ethics he sometimes writes as though he had not firmly grasped this ideal state. As is well known, he classifies the duties of one individual towards other individuals thus: he first distinguishes Justice from Beneficence, and then divides Beneficence into Positive and Negative. This may be a sound classification in Moral Therapeutics, and conceivably, though in a somewhat non-natural sense, it may be applied to the conduct of the fully-evolved man in the fully-evolved society. Duty in our sense of the word there will be none, for every man will always do his duty. Still, conceivably we may be able to classify the social actions of fully-evolved men as just, positively beneficent, negatively beneficent. But then on one of the last pages of the *Data of Ethics* we are told that "under ideal circumstances" Negative Beneficence "has but a nominal existence". The reason given is as follows:—"In the conduct of the ideal man among ideal men, that self-regulation which has for its motive to avoid giving pain practically disappears. No one having feelings which prompt acts that disagreeably affect others, there can exist no code of restraints referring to this division of conduct."[2] Here Mr. Spencer seems to be gliding into the opinion that Absolute Ethics is a code of restraints for ideal men in the ideal society. Let us be fair, then, and treat Justice in the same way as we treat Negative Beneficence. Under ideal conditions Justice also must have "but a nominal existence," whatever that may mean, for surely among ideal men the regulation, whether imposed on the individual by society or on a man by himself, which has for its object to prevent unjust action "practically," not to say theoretically, "disappears". No one is to have feelings which prompt acts that disagreeably affect others, and therefore surely there can exist no code of restraints which will coerce the ideal man into justice. We must not play fast and loose with the conditions of our ideal state.

[1] *Political Institutions*, § 578. [2] § 110.

Mr. Spencer, however, is not going to let Justice escape with a nominal existence, for is there not the law of equal liberty, and is not this law a law of Absolute Ethics? Very well, but that law is not an ideal code of restraints which are enforced by any forum, external or internal, against the ideal man, the promptings of whose nature are in perfect harmony with his environment. It can only be a formula which states in general terms what will be the conduct, or some part of the conduct of ideal men towards each other. What shape, then, does this formula take?

Now I understand Mr. Spencer to be still of opinion that the maxim of Justice is as follows:—Every man has the fullest liberty to exercise his faculties compatible with the possession of like liberty by every other man.[1] The maxim has a negative side:—No man may claim to exercise any liberty which is incompatible with the exercise of the like liberty by every other man. This maxim is perfectly intelligible when applied, as it is in *Social Statics*, to the actions of us imperfect men, though to the mode in which Mr. Spencer applies it some objections might perhaps be taken. So applied it is a test whereby we may judge of the rightfulness of any law or other interference with the liberty of the individual. Every individual is to enjoy equal freedom. If I may be allowed the phrase, the *objective* freedom of one is to be the same as that of any other. A law does not sin against this supreme rule merely because it is felt as more oppressive by one than by another. To respectable members of society a law against theft is no curtailment of *subjective* freedom, but there are disreputable members who do feel it to be a restraint on their liberty. The law, however, in this case allows to the vagabond the same sphere of objective freedom that it allows to the man who would never dream of taking his neighbour's goods. Such at least seems to be Mr. Spencer's view, for he thinks that the maxim of equal liberty allows or even demands the existence of proprietary rights.

But now this maxim is to be transfigured into a formula expressing the conduct of ideal men. How can this be done? Mr. Spencer is not of the number of those who believe that in the Golden Age all men will be equal, in the sense that they will all be able to do and think and feel the same things. Quite the contrary: society becomes ever more heterogeneous, and in the ultimate form of society the limit of heterogeneity is reached. There will be more difference between the powers bodily and mental of the ultimate philosopher

[1] *Social Statics*, c. 4, § 3; c. 6, § 1.

and the ultimate coal-heaver than there is between the powers of their present half-evolved antitypes. Men will neither do the same things nor be able to do the same things; the division of labour and the accompanying specialisation of abilities will have touched their utmost bounds. Not in this direction may we look for equality. But may it not be that though the activities of men will not be equal, yet they will enjoy equal spheres of action? Such language is perfectly intelligible when used of such men and such societies as at present exist; for when we say that a man is at liberty to do many things that he does not want to do, for instance, that every man is free to construct a system of philosophy, or to speak his mind, or to buy whatever is offered for sale, we have before our minds the fact that there are many things which a man may wish to do, and which but for legal or social coercion he would do, but which he is restrained from doing by restraint which he feels as restraint. He is restrained because he is not in complete harmony with the environing society; there is not yet "a complete equilibration between man's desires and the conduct necessitated by surrounding conditions". But when it has become impossible for any man to have any wish that society will not gladly see him fulfil, can it in any sense whatever be said of him that he is free to do anything save what he actually does? Such an assertion seems to me simply impossible. If ideal men were to be equal in all their faculties and capacities, then it would be possible to say that every one of them would have an equal sphere of action, but as they are to be unequal and yet are not to be prevented either by social pressure or by moral self-coercion from doing anything that they wish to do, their spheres of action, if that phrase be at all appropriate, will be unequal. There can be no "freedom of speech" where no one is ever tempted to say anything that will give pain to his neighbour. There can be no "freedom of contract" where no one dreams of entering into any agreements save those which the whole society will admit to be advantageous to it and to every member of it. The inference that I draw from this is that Mr. Spencer's ideal code, "formulating the behaviour of the completely-adapted man in the completely-evolved society," should have nothing to say about equal liberty, but meanwhile we must be on our guard, and when we ask for "a straight man" see that we get him.

Of course it may be true that, in a society such as our own, to enforce the law of equal liberty is the best means of hasten-

ing the advent of the happy time when man will be fully evolved and 'true self-love and social be the same'. Still, this is a matter which requires to be proved, and cannot be proved by the meaningless assertion that this law will be enforced in, or hold good of, a society fully evolved. For instance, if we be discussing freedom of speech, it is quite possible to maintain that perfect adaptation may most readily be produced rather by a rigorous suppression of all speech which can possibly give pain than by granting a wide liberty to those who have unfavourable opinions of their neighbours. This assertion may be very untrue; still it cannot be met by saying that in the ideal state there will be unbounded liberty of speech, any more than it can be met by any other phrase that has no meaning.

Whether Mr. Spencer still adheres to the "first principle" of *Social Statics*—the law of equal liberty—as an accurate and sufficient formula of Justice, is perhaps not quite certain, and since my own opinion is that from that formula it is impossible without a liberal use of quasi-legal fictions to deduce any code of conduct whatever, I would gladly believe in its abandonment. Still, it is quite plain that the Golden Age is to be the reign of Justice. Saturn returns to us and brings back the freedom of contract which our politicians have banished to his planet. Also, it is still plain to Mr. Spencer that Justice is (in some sense or other) Equality. For this identification he argues in his last work as in his first. Therefore I may be allowed to point out that the objection here taken to the law of equal liberty as a description of the relations which will exist between fully-evolved men applies also to any theory which finds equality in those relations. Society will be more heterogeneous than it is at present. There will be greater inequality between the faculties and capacities of different men than there is at present. Every faculty, every capacity will be fully exercised and satisfied. Therefore men will not have equal spheres of action; for if every faculty be fully exercised its sphere of action will be completely filled by its action.

I can well understand, though not altogether agree with, Mr. Spencer when in *Social Statics* he writes thus:—"This sphere of existence into which we are thrown not affording room for the unrestrained activity of all, and yet all possessing in virtue of their constitutions similar claims to such unrestrained activity, there is no course but to apportion out the unavoidable restraint equally. Wherefore we arrive at the general proposition, that every man may claim the fullest liberty to exercise his faculties compatible with the

possession of the like liberty by every other man."[1] This is a piece of Relative Ethics, of Moral Pathology. The sphere of existence does not afford room for the unrestrained activity of all, because we are not yet fully adapted to our environment. But I cannot understand Mr. Spencer when in the *Data* he writes thus:—"This division of Ethics" [the division which deals with Justice] "considered under its absolute form has to define the equitable relations among perfect individuals who limit one another's spheres of action by co-existing, and who achieve their ends by co-operation."[2] Of course the word *equitable* as here used does not imply that the relations among perfect individuals could possibly be other than they ought to be, that they could possibly be inequitable or iniquitous. But Mr. Spencer certainly does mean that in some form or another equality ("equity or equalness"[3]) is to be found in them. But how? Again, when it is said that these perfect individuals "limit one another's spheres of action by co-existing," these words must be used in a queer sense. There will be no coercion, no restraint, no pain inflicted by one on another, no "fear of the visible ruler, the invisible ruler, or of society at large," finally no self-coercion, for "that element of the moral consciousness which is expressed by the word obligation" will have disappeared. In short, a man's sphere of action will be limited only by his own spontaneous wishes and his physical constitution. There can be no talk of "the sphere of existence into which we are *thrown* not affording room for the unrestrained activity of all"; for it is just the essence of the sphere of existence into which we shall have *grown* that it does give every one room to fulfil his every desire.

Immediately before the passage just quoted, which speaks of the department of Ethics concerned with Justice as having to define the equitable relations among perfect individuals, we may read the following:—"Though having to recognise differences among individuals due to age, sex or other cause, we cannot regard the members of a society as absolutely equal, and therefore cannot deal with problems growing out of their relations with that precision which absolute equality might make possible; yet, considering them as approximately equal in virtue of their common human nature, and dealing with questions of equity on this supposition, we may reach conclusions of a sufficiently-definite kind."[4] I have quoted this passage because I may have spoken too hastily in saying that Mr. Spencer is not of

[1] *Social Statics*, c. 4, § 3. [2] § 109. [3] *Data*, § 60. [4] *Ibid.*, § 109.

the number of those who believe that in the Golden Age all men will be equal. If, however, the words just cited describe the problems with which Absolute Ethics must deal, then he does seem to think for the moment that completely-adapted men in the completely-evolved society will be so much alike in their powers and wishes that Absolute Ethics may ignore the differences between them and yet obtain "conclusions of a sufficiently-definite kind". Sufficiently definite doubtless, but also one would think sufficiently untrue. Surely in this procedure our strictly scientific Ethics would be substituting the perfectly homogeneous for the superlatively heterogeneous, the least stable for the most stable, the crooked for the straight. I do not think that this is really Mr. Spencer's meaning; rather he is thinking not of what men will do but of what they will not be restrained from doing by legal or social pressure. But I can only repeat that such pressure, these men being completely-adapted men in a completely-evolved society, is out of the question.

Similar difficulties are occasioned by what is said concerning Positive Beneficence.[1] We have already seen that the ultimate state of man will still afford opportunities for self-sacrifice though these opportunities will be rare. Flood, fire and wreck, accidents, diseases and misfortunes in general, are to be ours to the last, and will give us now and then a chance for an heroic act. This may be the ultimate state, but seemingly it should not, cannot be the ideal state. The geometrician would not put up with a straight line which on "extraordinary occasions" fell into crookedness. Self-sacrifice implies crookedness somewhere. Either he who offers the sacrifice ought to feel it no sacrifice, or he who for whose sake it is made ought not to need the sacrifice. It is, as I think, Mr. Spencer's opinion that Absolute Ethics has no place for self-abnegation. This could hardly be otherwise. It will be so even in the relation of parent to child. The ideal parent will not be called on to give up any pleasure for the sake of the ideal child. In doing for the child all that the child wishes the parent will find pleasure. Whether the day will ever come when the promptings of an inherited experience will teach the weaned child to leave your cockatrice alone, may perchance be doubted, but failing this adaptation of children to their environment, the adaptation of parents to children will probably insure as literal a fulfilment of prophecy as a judicious interpreter should

[1] *Data*, §§ 96, 110.

desire. But though self-sacrifice can have in Absolute Ethics no place at all, Mr. Spencer apparently thinks that there may be a place for Positive Beneficence. He says:— "Of positive beneficence under its absolute form nothing more specific can be said than that it must become co-extensive with whatever sphere remains for it; aiding to complete the life of each as a recipient of services and to exalt the life of each as a renderer of services. As with a developed humanity the desire for it by every one will so increase, and the sphere for exercise of it so decrease, as to involve an altruistic competition, analogous to the existing egoistic competition, it may be that Absolute Ethics will eventually include what we before called a higher equity, prescribing the mutual limitations of altruistic activities."[1] This last sentence has its difficulties, for an ideal code formulating the relations of perfect men begins to grow more perfect before our very eyes. It is perhaps to include eventually what it does not include now. Once more we must ask, whether perfect men will need, will be able to conceive, a code prescribing what they are to do, and placing them under an obligation to do it. And even this scheme of the higher equity which Absolute Ethics *may* eventually formulate is not apparently the ultimate state; it is not even the penultimate. For a time there may be an all too brisk competition among wealthy pleasure-hunters for the few remaining chances of an exquisite altruistic gratification, and the higher equity may be needed to prevent philanthropic jobbers from engrossing the occasions of beneficence or forming a 'ring' to 'corner' all those that are in misery and distress. But as adaptation goes on, the acceptance of a benefit will become very rare, and "altruistic competition, first reaching a compromise under which each restrains himself from taking an undue share of altruistic satisfactions, eventually rises to a conciliation under which each takes care that others shall have their opportunities for altruistic satisfaction".[2] Eventually perhaps Absolute Ethics will formulate first the compromise and then the conciliation, and yet it would seem as if men would not be quite perfect, for this "taking care" implies some self-restraint, some sense of obligation. What then does Absolute Ethics say now about Positive Beneficence? The perfect man will by the same course of conduct secure both his own greatest happiness and the greatest happiness of all. "The moral conduct will be the natural conduct,"[3] or rather morality will be a thing of the

[1] *Data*, § 110. [2] § 97. [3] § 47.

past. But we have excluded Negative Beneficence from our ideal code on the ground that "no one having any feelings which prompt acts that disagreeably affect others, there can exist no code of restraints referring to this division of conduct". Is there then to be even eventually and in the ideal state a code of restraints referring to the division of conduct called Positive Beneficence? If so, are men yet perfect in this ideal state? Seemingly beyond the higher equity there lies the compromise, and beyond the compromise the conciliation, and beyond the conciliation of each man with competing philanthropists must lie the conciliation of each man with himself. "That element in the moral consciousness which is expressed by the word obligation, will disappear," and the natural conduct will be—well it will be the natural conduct.

Possibly to a perception of this consequence we must attribute Mr. Spencer's apparent reluctance to admit that the ideal of perfect adaptation can ever be reached. We must not have our "straight man" all too straight, or there will be no place for any theory of Justice or Equality. The seer must keep his telescope just a little dusty, in order that the outlook may not be too blank for intelligible description. The sinless innocence of the jelly-fish or the angel is not a good material whereof to fashion the citizens of an instructive model commonwealth, without some admixture of sinful human nature, and "latent ideas" of nonconformity. Whether this has weighed with Mr. Spencer, or whether there is something in the doctrine of rhythmic motion that prevents our accepting really perfect social equilibrium even as an ideal, it is not for me to guess, but I think it clear that Mr. Spencer should deal with Positive Beneficence and with Justice or Equality as he has already dealt with Negative Beneficence, and say that under ideal circumstances they can have only a nominal existence, which is, humanly speaking, no existence at all.

F. W. Maitland.

IV.—THE WORD.[1]

It is a common accusation brought against the Doctors of the old Scholastic philosophy, that these writers have made their philosophical subservient to their theological system, and have so confounded the proper limits of each as to generate a common suspicion that the former is not the pure outcome of disinterested thought. At present it does not concern me to determine what, if any, foundation there may be for such an accusation. Those who are sceptical as to the existence of a supernatural revelation in the strict sense of the term protest, consistently enough, against any imagined connexion between the two; but believers in such a revelation conceive that it may be of aid to philosophy in three ways. It may call attention to a philosophical truth which, but for the particular dogma revealed, would have probably escaped the notice of the human mind. It may serve to confirm, with its own high authority, philosophical conclusions already obtained by mere process of reason, while itself receiving elucidation from the philosophy which it confirms. Lastly, it may serve for purposes of illustration. In the present article two dogmas of the Christian Revelation—those of the Blessed Trinity and of the existence and nature of Angels—have been introduced for the last two reasons indicated above, principally for the last. I have judged that light would be thrown on the sense in which these doctrines are accepted by the Catholic Church, and, in particular, that the nature of the intellectual acts of Angels—whose existence is demonstrable by reason (as I hope to prove elsewhere)—would serve to illustrate the main subject of consideration in this paper. I do not then claim for the doctrines in question any demonstrative force. This they could only have for such as accept them on a Divine authority; and it is not to such exclusively or even principally that I address myself. If, therefore, there are those among my present readers, to whom the introduction

[1] The following article is printed as a representative specimen of a mode of thought which, having survived all through the modern period, is now asserting itself as an active factor on the philosophical field. As such, it needs to be understood alike in its principles and results. The author's frankness in his declaration of principles will be recognised. He kindly supplied the introductory paragraph, at my request, after the article was accepted for the Journal.—Editor.

of these articles of faith would prove a stumbling-block rather than an aid, let them omit the allusions. The main arguments will remain unimpaired.

The word is a term pregnant with mysteries; though practically nothing more universal, common, constant. In its exhaustiveness as inclusive of concept and language it is proper to man; in its fullest latitude it is common to all spiritual natures. In the Divine Trinity the Word is the Wisdom of the Father in its ultimate expression,—the substantial speech of the Three Divine Persons Each to Other.

In Angels, or pure Intelligences, there is not only the internal word, but there is likewise an external word or sort of speech by which each communicates with other. Of what character is this angelic speech? Who can adequately answer this question? Yet two things may be confidently predicated of it, each of which has important bearings on the burden of the present paper. The words of Angels are not their bare thoughts; otherwise all the thoughts of Angels would be, as it were, common property, and each much-containing thought of an Angel nearest the Throne could be spoken to one of the lowest orders. The other point is this: the words of an Angel are a transcript of his thoughts in some way or other, and run parallel with them. Hence, as in the thoughts of the hierarchies of heaven there are thoughts common and thoughts special; so in the words of Angels there is a speech common and a speech which is an esoteric language communicating either with the Divine Majesty or with such of the Angelic hosts as, by virtue of their essential nearness, are competent to understand it. Once more: an analogy drawn from human conversation justifies us in inferring that the transformation of an Angelic thought into a word is subject to volition; more particularly when we bear in mind that no Angel can act upon another at a distance, and that the personal presence of one Angel with another is the result of an action of the will.

But it behoves us to determine what that something is, by virtue of which the secret thought of an Angel is transformed, as it were, into a communicative word. It must be something real, as is plain; otherwise Angelic contemplation could be but congregational worship, or a sermon delivered before the spirits of Angels and of Saints,—not always understood or at least comprehended by the many. It is as plainly something not substantial or essential; for

in such case it could not be subject to the individual will. Neither can it be a pure accident in the specific sense of the word; because Angelic language is absolutely (*de potentia absoluta*) inseparable from Angelic thought, though Angelic thought is separable from Angelic language. What remains, then, but that it should be an accidental mode, completorial after a manner of the representativeness before others of the concept? To explain: a thought, purely *as* thought, is an impress of the object, but not an express image of the object. It is in the Spirit as a cognition, an intuition (for pure Intelligences do not reason), but voiceless, so to speak, and consequently uncommunicative. It is presentative of the object to the subject of cognition; and in reflex thought is really representative, but such *to the thinker* exclusively. Somehow it must be complemented, in order that it may be able to pass from spirit to spirit in the way of Angelic colloquy.[1]

An illustration of the same truth is to be found in the mystery of the B. Trinity, as taught in the Church of Christ. The substantial Wisdom of God is common to the three Divine Persons, being in all things identical with the Divine Essence. The second Person is the Divine speech (so to speak), generated by the Father as the expressive Word of His Wisdom, the Image of His Brightness, the substantial Voice of the Divine Interlocution; so that there are Fathers of the early Church who have not scrupled to affirm that without His Word God would be mute.

Now, if the Divine Word is the infinite Archetype of all created words, we are naturally led to conclude that, between the concept or intuition of a pure Intelligence and the communicative expression of the same, there is a real difference which, forasmuch as an Angel falls inconceivably short of the simple perfection of God, could not be resolved in the embrace of an all-containing oneness. So it is. As the concept of an Angel forms no part of his substantial nature, but is a spiritual accident; so neither is his word, by which he communicates his thought to another pure Intelligence, a substantial reality, but rather a spiritual mode complementary of the concept as medium of communication, and revocable at will. The result is a spiritual composition of some sort, and a purely modal termination.

[1] Gonet after explaining the doctrine of Scotus and Suarez on this point, adds: "D. Thomas vero (in *Summa et Verit*, Q. ix., *a.* 4, 9m et 11m) dicit locutionem angelorum consistere *in sola ordinatione conceptus loquentis ad eum qui loquitur.*"—*Clyp. Thomist. De Angel, Disp. xv., a.* 3, *Sect.* 11.

Thus much has been purely introductory and elucidative. I now proceed to the question which I have proposed to myself in the present paper,—the nature and characteristics of the human word. It is plain that the human soul is the lowest in the order of spiritual beings and, consequently, the most composite. Its faculties form no part of its essence, but are properties flowing from the essence; wherefore between the two there is a real metaphysical difference and composition. It is further plain that the human intellect is capable of an inner or spiritual word by means of which it is able to communicate with other spirits; otherwise a disembodied soul would be absolutely dumb. But these forms of spiritual communication it shares in common with pure Intelligences. There is one point, however, that is characteristic of the human soul, and constitutes an essential difference between it and a pure spirit. The human soul of its nature is an incomplete substance. It is created to be the form of the human body. Man is made of soul and body. He is not soul only, or body only, but a rational animal;—that is to say, he is a person having a body that is informed by a rational soul. Hence, two things: as formally *act* of the body, the human soul postulates certain lower faculties that have their seat in, and energise by means of, the bodily organs. For so long as the soul is united to the body, these faculties persist; even though sometimes impeded, and even rendered impotent of act, by some lesion of the organ. But as soon as the soul is disembodied, they only remain potentially in it; that is to say, they no longer exist in themselves, but the soul is competent to reproduce them, whenever it is reunited to the body and consequently to the proper organ which is the partial subject of these faculties respectively. The other point, which is of the gravest importance in relation to my present argument, is this: man receives his primitive impressions of external objects from these lower faculties, which we may henceforth call the senses. Further: For so long as the soul is cabined in the body, the intellect neither has nor can have any object capable of determining its indifference and arousing it to the energy of act, save through these sensile impressions. These are the fontal source from which all human cognition, even the most abstract and universal, primordially proceeds. Hence the saying of Aristotle, which has become a proverb in the School: *There is nothing in the intellect, which has not had a prior existence in the senses.* So far does this intimate and, in the present life, indissoluble union between the intellect and the senses extend, that no

thought is possible without an accompanying phantasma,—that is to say, either some new sensile impression or the resurrection of some old one. In the actual order,—*i.e.*, so long as man lives this mortal life,—every concept of the mind must be accompanied by that which in one way or other is a sensile counterpart of itself. As the human soul, then, cannot think to itself without the aid of the senses; in like manner it is prone to conclude that it cannot intercommunicate with another human soul without the aid of some bodily organ. Not only so; but the communicated thought cannot reach that other soul for which the communication is intended, save through the instrumentality of some other organ in the latter. This conjoined instrument is Language, or Speech, which postulates a tongue at one end and an ear at the other. Writing is not considered as an entity distinct from speech, since it connotes only a diversity of organs;—a hand at one end and eyes, or fingers for the blind, at the other. The virtual identity of the two is plainly seen in their easy mutual transformation. A book read becomes speech; a speech taken down in short-hand becomes writing. Thus our past examination brings us face to face with the outside word of man,—that which is usually called human language.

There is, however, one other preliminary point to be settled, before entering upon the main inquiry. Is it possible for the human mind to form a universal; if so, what is the nature of the operation? The common sense of mankind, experience, and the constant testimony of consciousness afford a certain answer to the first question. One of the primitive ideas of a child is more than a universal. It is a transcendental. When first the curiousness of the young intellect is aroused by attention to the sensile perceptions of the external objects that surround it, the little one conceives every object that it perceives to be *a thing;* and it then strives, by its own infantine observations as well as by questions put to such as for the time being are its infallible authorities, to discover differences, by means of which it descends from the highest genus through subaltern genera till at length it attains to an acquaintance with the specific nature of the thing. Nor does the ordinary pronominal prefix—*this* watch, for instance—interfere with the universality of the concept; it only exhibits the attachment of the awaking mind to the singular concrete,—in other words, to the phantasmata of sense. The intellect supplies that which is represented by the noun; the phantasma suggests the individual repre-

sented by the demonstrative pronoun. The result is, a universal in a singular. The answer to the second question is equally sure, though more recondite. It is clearly shown in psychology, that the proper object of the intellect is a universal, and that the intellect is only bound down (as it were) forcibly to singularity or individuation in its concept by the active presence of the sensile phantasma. But I do not purpose to delay over this primitive, though disputed, fact of ideology; because its full exhibition would postulate a space larger than I could hope to occupy, and would send us off drifting from the main conclusion at which I am aiming. I will therefore pursue an easier path. When several human beings—to supply an illustration—become present to the mind by means of sensile perceptions, the mind discovers by a sort of instinctive reflection that the objects thus represented have, all of them, certain points of similarity in which they accord with one another and differ from other objects that surround them. They have the power of talking with one another,—can read and write when taught,—can laugh at things funny,—can argue, &c. These powers the thinker likewise recognises in himself. All such notes he separates from the individuals which primitively exhibited them, and unites them in the idea of *rational*. But he goes on to compare this class of individuals with other objects of sensile perception, and he finds certain characteristics common to both; locomotion, for instance, senses, a nervous system, sundry organs and members. These too he finds in himself. He includes these under the one common idea of *animal*. Thus by conjunction of the two sets of notes he conceives the first-named objects of his senses under the universal concept of *rational animal* or *man*. I do not say that this is the only or even ordinary method of conceiving an absolute universal; for the absolute universal is object of intuition in the way already stated. Yet we come across instances of the formation of universals by comparison, as in botanical and zoological classification; and this latter process is more easily tested by experience.

From these data thus much may be gathered; that universals, *as such*, have no objective existence. They are partly conceptual, partly real; and their reality is recognised in that similarity of notes as derived from a common model, —the prototypal idea that is the measure of their eduction and development. The same twofold nature is discernible in concrete as well as in abstract universals, but in the latter the conceptual element assumes wider proportions;

and it seems advisable for this reason to add a few words concerning them. They are of two kinds :—*viz.*, such as have been obtained from substances, and such as have been obtained from accidents. To begin with the former: From *animal*, which is a concrete universal, the mind is capable of extracting the idea of supposit—that which completes the substantiality by giving to substance its incommunicability to another *as* substance or nature. After such abstraction there remain the essential notes by which *animal* is distinguishable from another whatsoever group of being; and these notes, embraced in one comprehensive idea, are conceived as a form (metaphysical) informing the supposit and determining it to its specific nature. This idea we express by the term, *animality;* just as from *man* we form the abstract concept of *humanity* or *human nature.* Abstract universals derived from accidents exhibit a more complex process of abstraction. According to the essential condition of an accident, in the order of nature it must inhere in some substance as in its proper subject. Accordingly, it is declared to be *being of being (ens entis)* rather than *being* absolutely; although it has a real entity of its own. Now, after abstraction made of the individual notes (which is a prerequisite of every sort of universal), abstraction is, or may be, made of the substantial subject, and the accident remains in its own solitary state as possible accident of an indefinite number of material substances. Thus, for instance, we may begin with a *red rose;* and thence arrive at the simple attribute, *red.* But the process of abstraction may be carried yet further. The mind may direct its attention to the accident, exclusively as to a form capable of informing its subject. It may intend to represent its essence as it is in itself. It reduces the accident to the condition of a *quasi*-substance; and thus conceives the idea of *redness*,—a quality capable of producing in the sense of sight this particular colour. True it is that, as I have already stated, there is more of the ideal entering into the composition of these abstract accidents; yet even in these the fundamental reality on which they are constructed is apparent. This, too, is worthy of close attention, that by how much these abstract universals recede further from the contingent beings which are the source of the genesis of such ideas, by so much do they approach nearer to that prototypal idea which, though in its own being singular, *as an exemplar* is a practical universal; just as a negative in photography is potential of an indefinite number of positives. Accordingly, this is one reason why all science

is of universals. That the human intellect has this abstractive power, is demonstrated in ideology; and one easy proof is derived from the testimony of consciousness.

Let us now return to the main theme of this paper,—human speech, or language, as the *word* by which man conveys his thoughts to his brother man. There is a problem connected with its genesis, which is only indirectly connected with the main drift of the present article, and is perhaps the most difficult that linguistic offers. I shall only refer to it very briefly, and in so far as it affects the conclusion at which I am driving. One theory, connected with the origin of speech, is included in the well-known definition of Aristotle, who declares speech to be "a sound" of the human voice "symbolical according to agreement".[1] The Philosopher, then, seems to consider that language is the result of a voluntary compact; and this is one of the theories that has been advanced touching the origin of languages. But there appear to me to be insuperable difficulties in the way of such a hypothesis. (1) In order that men should be rendered capable of such a compact, it would be necessary that they should be able to intercommunicate with one another in order to arrive at a common agreement; and bodily signs or gestures would be far too rude an instrument for such an enterprise. (2) This difficulty would be considerably augmented in the instance of what may be called—as it has been called—the formal part of a language, in which the special relationship of cognate languages is discoverable. Now, the said forms mainly consist in the prefixes and suffixes, modes of declension and conjugation. But agreement touching these could never be indicated by telegraphic signs between those who are supposed to compose the convention. (3) The theory in question is incompetent to offer a reasonable explanation of the marked differences between the forms of one language and those of another; more particularly if we take into consideration the common affinity, mediate or immediate, by which the languages of the world attest their derivation from one original source. What sufficient reason can it proffer for the adoption of a new system of grammatical forms after the migration of a race from their home to other distant quarters? Whence comes it that, in order to express the future tense of a verb, some nations have adopted the conversive *vau*, others a change of suffix, others again a distinct auxiliary verb? One can hardly understand how

[1] φωνὴ σημαντικὴ κατὰ συνθήκην. *De Interpret.* c. 2.

the busy and hazardous work of migration could leave leisure for so arduous an undertaking. Yet after settlement in their new homes, up to which time they must have used their native tongue, it is unconscionable to suppose that they would set about the formation of a new speech with new modes of declension and conjugation; unless, indeed, it can be made to appear that there is certain historical evidence in favour of the supposition. (4) This difficulty, in presence of the compact-theory, becomes intensified by the opposite method of writing and reading in the Semitic and the Aryan groups of languages,—the former writing from right to left, the latter on the contrary from left to right. One is puzzled to imagine how such a difference or change could have been introduced by authority of a tribal synod.

It is perfectly true that a language, *subsequent to its substantial constitution*, continues thenceforth to be enriched by the coinage of new words or by adaptations from other languages. But three things are noticeable touching these additions. One is, that these words are for the most part technical. Thus, many words have been borrowed by us from the French in the sciences of cookery and of war; and physicists in most modern languages are coining each year a multitude of new words. Another remark is, that these additions never touch the forms of a language; on the contrary they are for the most part submitted to the regulation of such forms. Thus, in French mensuration the term *centimètre* has a Latin head, a Greek body, but a French tail. How far such composites are an ornament to a language, is a question of taste. The last and most important remark is, that in all these cases of new nomenclature the first introduction of the word is never effected by a national compact or anything like it, but invariably begins with the use of the term by some individual. If the word in question is a technical term that has been coined by one who has acquired a great reputation in a special branch of knowledge, and if his reason for adopting the term seems to be a sufficient one, the new coinage is at once stamped in the mint of public opinion. The word, *concept*, introduced by Sir William Hamilton, is a notable instance in point. If, on the other hand, the new term is added to the common language of literature, it has to submit to a more serious ordeal. Should it begin to appear in the leaders of our more prominent newspapers and in periodical literature, its life is ensured,—in many cases, to the detriment of the language. Such is the importation

of new words or of a new sense to a recognised word, as, for instance, *location, stores;* and in like manner misspellings, such as *marvelous* for *marvellous*, and *develop* for *develope*. There is another important class of words that are rendered necessary by some new invention; such as *locomotive, sleepers, shunt, breechloader, telegraph, telegram, &c.* But in no one of these instances of augment in the vocabulary of a language is the introduction of the term due to other than individual use; though it is sanctioned afterwards by a more or less general public sanction. Finally, the words so introduced are commonly concrete not abstract; though in time they may give occasion to a corresponding abstract,—as, for instance, *telegraphy* from *telegraph*.

I have discussed the above theory touching the genesis of language, not only or principally because of the grave authorities, ancient as well as modern, who have adhered to it, but more particularly because it is the one theory that seems to lend a certain air of plausibility to nominalism under its various forms; and it is towards the exposure of Nominalism, by a careful examination of *the word* in its universal acceptation, that the present paper is directed.

Now, the human word, like the Angelic and in a manner the Prototypal or Divine Word, is twofold. There is an internal and an external word. The former is the completed concept as representative of the object to the conceiving soul itself exclusively. It is, therefore, necessary to both Angelic and human thought and is no wise subject to volition, presupposing the normal presence of the object and the requisite conditions. The latter is the same concept as communicable to others. It has been seen that in all probability Angelic speech is the result of a modal termination of the concept itself; in man, on the contrary, speech is the result of bodily organism. In like manner, the Divine Word is justly understood to be both internal and external,—or, as the Greek Fathers expressed it, ἐνδιάθετος and προφορικός. As internal, He is the expression of the Divine Wisdom within the infinite abyss of the Divine Essence; the External Word may be said to include all the Theophanies in time, but pre-eminently that of the Incarnation. The first is absolutely necessary; the Theophanies are subject to the Divine Volition.

For the avoiding of confusion and error, it is of importance to remark, that the internal human word must not be confounded with those soul-echoes of human speech, which in the order of this life are the necessary accompaniment of

all abstract thought, and of all thought whatsoever that is not formally intuitive of its object. These are simple phantasmata of a special kind, and are the product of the lower or sensile part of the soul. The internal word of the human soul is the complete concept as representative to the conceiving mind, of its object. When a phantasma of the object is not directly present, its place is occupied by a phantasma of the object's name; for the human intellect, so long as it is connected with the body, cannot energise in thought without an accompanying phantasma of some sort. This latter is a condition *sine qua non* of human cognition, presupposes the corresponding concept, but has nothing in common with the intellectual act itself.

Let us now revert to that which is fundamental and incontrovertible in Aristotle's definition of speech. It is a sound of the voice that is symbolical. There are other sounds that are not symbolical in the strict sense of the term, such as coughing, laughing, humming, whistling, &c. Thus *sound of the human voice* is the genus of language, and *symbolical* is its differentia. But of what is it symbolical? Clearly enough of thought; for it is plain from experience and from our own self-consciousness that such is *de facto* its universal use. It is true that there are interjections which are expressive of feeling rather than of thought; but these are very imperfect words, since by a mere change of tone you may make one and the same interjection to represent a multitude of distinct feelings, as, for instance, the interjection *oh*, which can alternately express pain, or indifference, or joy, or surprise, or tenderness, or terror, or admiration, &c. Such symbolical sounds of the human voice approach most nearly to the sounds of brute animals, and it may be said that they are, as it were, accidents of language. Yet even in these sounds (whether human or animal), if and so far as they are symbolical, two things are evident: the one is, that the feeling at least in order of nature precedes the sound; the second is, that the feeling generates the sound, not the sound the feeling. In like manner, whereas language is symbolical of thought, it is the thought which primitively gives birth to speech, not speech which gives birth to thought.

Such a necessary priority is involved in the nature of a symbol, whatsoever the form this latter may assume. A symbol is a symbol of something,—an expression of something. In itself it is either a purely mechanical contrivance or a physical act. There is no reason why the elevation or the depression of a piece of wood should affect the

engine-driver; nor indeed could it do so, unless it were invested with a meaning previously conceived in the mind of the signal-master. But the thought must have been previously connected with the sign in the intellect of the driver likewise; otherwise, he would be as puzzled at the motions as a person who cannot read in presence of a book spread out before him. One is compelled to own that in the mind of the engine-driver the signal is *provocative* of the thought. But this admission in no way impairs the argument. For it is of the nature of a symbol that it should imprint its meaning, or the thing symbolised, in the recipient; because its *raison d' être* is, to be communicative. In like manner, on the principle of sufficient reason, there would be no human voice if there were no human ear. But the question with us concerns the origin of speech,—of words,—not the origin of hearing.

It will not be amiss to pursue this argumentative analysis somewhat further. If any word whatsoever could *of itself* generate a thought in the human intellect, this word must have proceeded either from another person or from the thinker himself. But the former hypothesis is impossible. For, in order that a certain combination of vocal sounds may be able to give birth to a concept in the mind of the hearer, it is necessary that the concept should beforehand exist virtually in the mind of the latter; should this not be the case, the articulate sound would prove only an empty beating of the air, and its product an unintelligible word. If one were to address an importunate beggar in the streets with the words *πολυφλοίσβοιο θαλάσσης*, the phantasma excited in the sense of hearing would awaken in the mind no corresponding concept,—to put it in plain English, the vagrant would have no idea of what the speaker meant. This articulate sound of the human voice would not be symbolical to him, and accordingly would not be speech for him in the true meaning of the term. I cannot help thinking that such is the meaning of the *κατὰ συνθήκην* included in the Aristotelian definition, and that its supposed reference to the genesis of language is a misapplication of the term. It has been already stated that two points are essential to language, as being a communicating symbol,—*viz.*, that there should be a voice and an ear. Now, by ear is not only intended either the bodily organ (the external sense) or the sense of hearing (the internal sense), but a common agreement between speaker and listener touching the symbolism of the communicated word or speech. It is absolutely necessary that the listener, either by dictionary or

other means, should know more or less the meaning of the articulate sound; under no other circumstances could language become an intelligible symbol. But what constitutes the meaning of a word or sentence, if it be not the concept intended to be conveyed by the speaker? It is obvious, then, that a spoken word cannot be accredited with the genesis of thought. There is absolute need of a virtual agreement between him who speaks and him who listens touching the particular symbol and the particular thought or object symbolised. Is not this the genuine meaning of Aristotle's *κατὰ συνθήκην*? This is plainly the opinion of St. Thomas,[1] who, commenting on the definition, remarks: "Some, on the other hand, have maintained that words do not derive their signification from nature (such is the contention of Aristotle in this place); but in this respect they derive their signification from nature, that their signification is in accordance with the nature of things, as Plato has remarked." According to Aristotle, then, the words do not in their own nature exhibit the thought intended to be conveyed, but have been arbitrarily adopted for this purpose. Who, indeed, could imagine otherwise, in presence of so great a multiplicity of languages? Of course, Aristotle had in his eye the languages and existing state of things in his own day. Accordingly, his definition could not have been intended to include the primitive or paradisal speech about which he in all probability knew nothing; whereas the form of expression in the Pentateuch [2] seems to suggest that the Adamic vocabulary was a natural symbol of both the concepts and the objects of the concepts.

Thus, then, it is clear that speech could not of itself give birth to new concepts in the mind of the listener, but presupposes the symbolised concept already latent in his memory. The origin of language, however, could not be attributed to him who hears but to him who speaks. Let us now, therefore, betake ourselves to the second alternative.

Is it possible that any man should pronounce a word in the actual order of things, which could convey to his own mind an idea that was not there before? The question

[1] "Quidam vero dixerunt quod nomina non naturaliter significant quantum ad hoc quod eorum significatio non est natura, ut Aristoteles hic intendit; quantum ad hoc vero naturaliter significant, quod eorum significatio congruit naturis rerum, ut Plato dixit."—*De Interpr.* L. i., lect. 4.

[2] *Genesis* ii., 19, 20.

necessarily includes the supposition that the vocal sound had not been previously conveyed to him by another; otherwise, it would be included under the former alternative. Further, I suppose an externally spoken word; since, according to the hypothesis, this latter must precede the internally spoken word, which is a phantasmic echo of the former. The question thus conditioned admits but of one answer; the thing is naturally impossible. For what after all is a speech-sound? Certain undulations of the air strike upon the tympanum of the ear, and thereby produce in the sense of hearing the perception of an articulated, complex sound. This is all. What proportion is there between this purely sensile perception and a concept of the intellect? Sound is not representative of an object in the same way or to the same extent as the perceptions of the other senses; for the other senses represent either active qualities or the quantity, —sometimes both,—of the object; whereas the perception of sound does little more than represent the object as cause. Accordingly, the sensation of sound, even when purified by the acting intellect with the purport of rendering it fit for determining the intellect to a perception of the object, offers comparatively few notes or marks characteristic of the object. Yet even in this respect it presupposes the object which it represents according to its nature. But the question I am now mooting is concerned with the symbolic power of articulate sound; and here the difficulty is all but infinitely greater. A man is supposed to utter some word, of the meaning of which he is wholly ignorant; and yet it is suggested that such sound is capable of infixing an idea in the mind of him that utters it. What possible proportion can there be between the two? How can a perception of the senses of itself cause a concept, utterly distinct from the energising voice, in the intellect of the speaker? The former we share with the beasts and is material; the latter is a spiritual act which is common to us with the Angels. It may be said that the word is sufficient as a symbol; for even pieces of wood, lamps, flags, cannon, rockets, &c., are capable of communicating an idea. Most true; but the reply has been anticipated. It is necessary, in order that any entity may be able to function as a medium communicative of thought between two persons, that the speech of such symbol should have been previously understood and agreed upon by both of the intercommunicators. But in the assumed instance the two persons are one; and, according to the hypothesis, this one is ignorant of the symbolism of the vocal articulated sound. If, then, this sound generates a concept, it must be *naturally*

in virtue of itself. Yet how is this possible? The symbol has no message to give, none therefore to receive. If *good*, for instance, can naturally impress upon the intellect the idea which the term represents; how is it that *buono*, *bon*, *ἀγαθόν*, the Hebrew *tob*, are equally capable, according to the hypothesis, of impressing the same idea?

Again, if the doctrine were true, that language of its very nature is competent to generate thought; then it would cease to be symbolic,—to be a simple instrument for the communication of thought,—and would become a physical efficient cause of thought; for its expression would be sufficient, apart from everything else, to produce a new thought in the intellectual faculty.

Yet again, if a spoken word has the natural faculty of implanting in the intellect a new concept, surely it must acquire the power from the rightful disposition of parts,—that is to say, from the exact selection and collocation of syllables and letters. In a newspaper that fell into my hands some time ago I found it stated, that there is a Viennese word to express 'the bursting of a water-pipe': and this word is *Hochquellenwasserlieferungerohrenfatalität*. Now, the question is: How did this word *first* become a conventional symbol of the idea indicated? There must have been some one man who originally introduced it; unless we are driven to maintain that it was the result of a miraculous interference. But how could any man construct this complex compound word without any previous idea of the object symbolised? What principle of selection would guide him? What faculty of the soul is there, which would be competent to direct him towards the precise choice of syllables and letters whose combination, by its natural and singular nature, should impress on his mind an idea of which he had been previously unconscious? Perhaps it may be urged in reply, that the term is a compound of words already received, and that the combination, in accordance with the genius of the language, would be comparatively easy. True, but this only throws the difficulty further back. To take one of the component words: some one must primitively have chosen *Wasser* to express the object which we call *water;* and, according to the hypothesis, of this object he had no previous idea. He has uttered the word as the only means of informing himself in the cognition. Further, there are probably other possible combinations by which the Viennese inventor might have given expression to the same idea; unless we are prepared to maintain, in defiance of the evidence for the existence of synonyms in every language, that there is but one natural

expression in human speech for one concept. Such a contention, however,—to say nothing of other inconsequences that beset it,—is incompatible with the existence of more than one language. For, if one articulate sound is a natural development of the given idea; it does not stand with the ordering of nature which admits nothing superfluous, that another articulate sound should be endowed with the efficacy of impressing precisely the same idea.

Lastly, it tells strongly against the theory in question, that it represents the human word as being in direct antagonism with the Prototypal Word no less than with the Angelic Word,—I mean, with the external or communicative word of this latter. In the Divine Theophanies, pre-eminently in that of the Incarnation, the Word is external in both senses of the term. These Economies are so many temporal manifestations to man of the Wisdom of God. But such Economies, or temporal Manifestations, of the Word are but Revelations of the everlasting Word Whom they represent after a limited manner to this or that person or to a certain body of men. So is it likewise with that greatest of Theophanies,—the Incarnation of the Son of God. The human nature was itself a speech; but the words which Jesus uttered were a formal communication to us of the Divine Wisdom as substantially expressed in the Word, though limited and partial. They were so many echoes of Truths existing eternally and immutably in the one idea which is the Wisdom and Word of God. But all these Economies or Theophanies presuppose the Word or the Divine Wisdom of which they are a communication. The Word does not presuppose them; they presuppose the Word. So is it with the intercommunion of thought between Angel and Angel and of Angels with men. Angelic voices are probably a mode, or accidental termination, of their cognitions, their internal words. They are so many negatives, present at will, by which spirit can photograph (so to speak) his thought on other spirits and even on the human soul,—voiceless yet expressive,—that which poets not inaptly term, "whispers of Angels,"—those unexpected suggestions of good and intuitions of latent evil which are given us by their ministry. But all these voiceless voices are a photographed thought, contemplative or practical; and without the preceding thought there can be no photograph. It is not the photograph that generates the negative, but the negative that produces the photograph.

Are there, then, any sufficient or even plausible reasons for supposing that in this respect the human word is the

exact reverse of its great Archetype or of the language of Angels? Forasmuch as the human soul is not a complete substance but postulates a body as the necessary complement of completed unity of substance, it is true that the soul communicates its inner word by means of a special bodily organism, to which there is a corresponding organism in the person receiving the communicated word; yet this fact in no wise affects either the analogy which is here maintained or the confirmatory argument deduced from it. For in proportion as the medium of communication is more pronouncedly distinct from the cognition which it contains, so does the symbolic nature of the medium become more important and prominent.

In answer it may be urged, that these arguments have a certain amount of cogency in regard of concrete words and propositions which correspond with, and presuppose, perceptions and direct judgments of existing objects cognisable by sense; but that they have no force when applied to universals concrete and abstract. The former terms represent the perception of a real existent object; the latter, an object purely ideal and having no substantive existence outside the mind of the thinker or speaker. It is easy to understand, the objection might proceed, how concrete terms in the most rigorous sense of the phrase could, according to the convention-theory, have been invented and adopted. The way that a child picks up by degrees the simpler elements of its native tongue is a conspicuous example in point: *What's that?* pointing at the same time with its tiny finger. The pointing alone (be it observed) would prove a sufficient substitute for the demonstrative pronoun. The nurse plucks the flower, and says it is a rose. The little one toddles off with the flower to its mother, and cries out, *Ma, rose.* It has learned its early lesson. It smells, touches it (let us suppose it to be a moss-rose), looks at the colour, pulls it to pieces and gets a faint idea of its form. Thus it gradually by perceptions of sense gathers together the characteristic notes of the object; and henceforth the name recalls the object as made known by its differential qualities. It is noticeable that the speech of a child at first represents the singular and concrete, and it expresses for the most part no judgments which are really such, but only propositions which are symbols either of interrogation or of feeling. Then it learns after a time to form judgments and to pronounce them. Finally, after reading for some time in books and listening to conversations, it becomes familiar with universals and abstract

names. Is it not plain, then, that in the last-named instances the word introduces the fictitious idea; not the idea, the word? Add to this, that these so-called ideas are not representative of an objective reality, but are a mere coinage of human industry through the medium of language; and can, therefore, be taught only by the instrumentality of language. Lastly, the extreme section of the philosophers who maintain this view does not hesitate to declare that these abstract universals have no objective equivalent, that they are certain artifices of speech invented by men for convenience of classification and for other cognate uses.

What is to be said in answer to these nominalist theories?

At the outset I am free to confess that there is an undeniable difference between singular and universal names; because there is an essential difference between a singular and a universal concept, of which the former are the vocal expressions. The object of a singular concept, if the object be a reality, is an existent entity formally as such. The object of a universal is conceptual in its form and neither has nor can have any existence outside the mind. There is no *αὐτοσκεῦον* that embraces all individual shoes; as Aristotle smilingly remarks in his *Nicomachean Ethics*. Hence, the same Philosopher declares in his short work on the *Categories*, that first or individual substances are to the human mind the foundation of second or universal substances. *Man*, for instance, does not and cannot exist in nature outside intellect of some sort; though *this* or *that individual* man can and does so exist. Yet, on the other hand, first substances are the real foundation of second substances; wherefore, universals are neither purely logical nor pure forms of speech, but conceptual,—that is to say, they are logical in form, though built up on a real foundation. It must further be admitted, in justice to the more moderate school of nominalism, that there is likewise a conspicuous distinction between a concrete and an abstract universal, in that the latter is the abstraction of an abstraction. A concrete universal represents a universal supposit of some sort, personal or other; while the abstract universal represents the simple essence without representing the substance as ideally terminated by its own incommunicability and in full possession of itself. This will be best explained by an illustration or two. *Water* is a concrete universal, representing the substance as substantially incommunicable to any other substance and in possession of itself; *wateriness* is an abstract universal, representing the essence as a meta-

physical form by virtue of which water is what it is. It represents the form without connoting the subject. In universal accidents, from the very nature of an accident, the distinction is more obvious. Thus, *white*, which is a concrete universal, connotes a subject that is white; *whiteness*, which is an abstract universal, does not connote a subject, but merely denotes the essence of the accident. Similarly, the term *man* is a concrete universal, since it connotes *person*, or intellectual supposit (not an individual person, observe); while *humanity* is an abstract universal, inasmuch as it exclusively denotes the specific form by virtue of which man is man. In all these and similar examples the concrete universal exhibits the essential form as inherent in the subject; while the abstract universal makes abstraction of the subject. It is therefore doubly impossible, so to say, that an abstract universal should formally represent any object capable of existence outside of any whatsoever intellect. Nevertheless, there is a real foundation for both concepts. For the abstract universal represents those specific notes which characterise each and every individual man, —to resume my last instance; while the concrete universal in addition represents universally that substantial mode by which human nature is terminated to its personality,—that is to say, the mode by which each individual nature is terminated to be this or that person, incommunicable as a nature to any other. Spite of the above concessions, it must nevertheless be maintained that universals, whether concrete or abstract, form no exception to the general law of all human speech. They, like all other words, are symbols of concepts; and consequently they presuppose the concept of which they are the sign. In the instance of him who uses them they do not generate thought, but the thought generates them. Besides the reasons already given, which equally apply to universal as to singular nouns, the following additional arguments, as it seems to me, remove the doctrine defended out of the category of doubtful opinions.

(1) In the first place: Unless it is clearly apparent that an invincible obstacle intervenes, no sufficient reason can be adduced why a part of the words that constitute a language should be symbolical or communicative of thought, while the other part is not genetically symbolical or productive of thought. Now, if it admits of being clearly shown that an invincible obstacle intervenes, the argument must be either *à priori*, derived from the nature of the object or subject, or *à posteriori*, from the evidence of experience.

But it is impossible to prove such an obstacle *à priori*,—in other words, it cannot be demonstrated that there is a metaphysical repugnance in regard of the nature of the subject or of the object. For self-consciousness teaches us, that the human mind is endowed with the faculty of abstraction and of generalisation which is a sort of correlative of the former. In the next place, in every object presented to the intellect by sensile perception there are confessedly certain real notes of similarity with other objects, which form a sufficient objective foundation for the concept of a universal. Both these propositions have been already established in an earlier part of this article, and the second point will be further illustrated presently. As assuredly, the theory in question cannot rest on facts of experience. We are all conscious of the existence in the mind of universal concepts which, when compared with the individual intellectual perceptions virtually included under the former, are found to possess a real objective significancy distinct from that of the perception of the individual. The absolute universal concept represents the essence,—the notes of similarity common to all actual or possible individuals under a particular class,—does not connote existence, and excludes or ignores every individual note, while connoting a prototypal or exemplar Idea (real and objective) from which the individuals derive a common unity; while the singular perception formally exhibits the individual notes, and connotes the essence together with existence. It is further plain that these universal concepts exist in the intellect prior to the external word that symbolises and communicates them, for reasons already given. To take an instance: Sir William Hamilton could never have introduced the term *concept* unless he had previously had in his mind the idea of the completed act as distinguished from the process of conceiving,—of the psychological fact as distinct from the objective representation.

(2) While the object of sense-perception is an individual; the formal object of the intellect is a universal. So far as the intellect does represent individual differences in its idea, it is forced to do so, as it were, by its contact with the concomitant phantasmata of the senses, by the intervention of which it is rendered capable of becoming present to the object.

The formal object of the intellect is a universal; because the essences of things are the formal object of the intellect, and essences are absolute universals. Accordingly, in the genesis of human thought the primordial universals are

intuitive concepts; and these intuitive concepts become more numerous in proportion as the sphere of objects continues to enlarge. These intuitions of essences are natural, necessary, and in the infancy of thought vague and generic. The reflex universal, on the other hand, is voluntary, philosophic, and represents more or less definitely the specific nature of the object; though this last property it shares with the intuitions of the adult intellect, which are sometimes perfected by their reflex co-ordinates. Thus absolute universals are pouring into the human mind from the time it begins to energise. Now, if there be such universals, it is consonant with the order and analogy of nature, that they should be represented by their appropriate word. Hence it will appear, how singularly infelicitous it is to introduce into the nominalistic plea the instance of a child in its first efforts of thought; for, when carefully examined, this example affords one of the strongest *à posteriori* arguments in favour of the opposite theory. It is true that a child's intuitions are always singularised; but it does not follow from this that they are singular. As the intellect is determined to its intuition of the particular object by the presence of a sense-perception in the soul, and as the infantine mind is very feeble at the outset; it naturally leans on the phantasmata at that date much more than afterwards, since it cannot walk far in its own strength. But the intuition of a universal is there, enveloped (so to say) in the individuality of the object of sensile perception. Three characteristics of a child's talk corroborate these assertions. In the first place, very often when a child begins to lisp its thoughts, it uses its hand or finger instead of the demonstrative pronoun which is the expression of individuation; sometimes it uses both at once. An object of sensile perception, *purely as such*, does not need for symbol more than a bodily gesture, like the postures of a pointer or a setter. But, in the next place, the child's question does not extend to the individuation or individuating notes: oftentimes the child does not even discern these latter. Its demand is: *What is this?* Translate the phrase; it means, *Tell me the name for this species of things.* The child has already in a rough and imperfect way recognised in its mind the essence of the thing, and it seeks to know the name for it. Confirmation of this may be found in the frequent practice of the little one, after it has acquired the name. Let us say that the object of original inquiry is a rose. The child has learned the name; the next time it sees, not the same rose, but another, it cries out: *Mamma, rose,*—or, *a rose.* It has

gained the word of its universal concept, and at once proceeds to communicate its idea. *Rose*, or *a rose*, is a universal, and only becomes in intention a singular by gesture. Lastly, one of the child's first words,—one that is perpetual in all its questionings is *thing;* but *thing* is a transcendental, —an all-embracing universal.

The proposition I am now defending is further confirmed by an analogical argument derived from the Prototypal Word and from the language of Angels. The Wisdom of God is infinite and infinitely simple; consequently, in one infinite and infinitely simple Word He conceives and expresses all reality—His own essence as well as all those finite realities, created by His Omnipotence, which are distant shadows or finite likenesses of Himself. Thus His substantial Concept and Word—to speak after the manner of men—is infinitely universal at once and infinitely singular; infinitely universal because of His Omniscience, infinitely singular by virtue both of His Omniscience and of His Simplicity. The Thought of God is not only infinite in Its breadth, but infinite likewise in Its height and depth. Again: As the theologians and philosophers of the School commonly teach, the intellect of Angels is always actual; and of their own nature Angels intue their own nature as an intellectual substance in act; and they naturally intue God the Supreme as imperfectly imaged forth in their own purely spiritual being. But how do they intue the natures of other angels, since, according to St. Thomas and the more received opinion, each angel is specifically distinct from all others? How, again, do they intue material things? If they cognise them, how do they cognise them? universally only, or each according to its individual difference? The same authorities give for answer that in their creation these intellectual substances, or separated Forms, were furnished with certain intellectual species—impresses of the Divine Exemplar Ideas in the work of creation—by and in which they are cognisant of all the typal forms of the world visible as well as invisible; that in these universal cognitions they intue the differences of each individual under a common species, so that these same universals are likewise virtually singular, including *the whole* of comprehension as well as *the whole* of extension; and that in proportion to the higher rank of an angel in the heavenly hierarchies, the number of these intellectual forms diminishes, and the unity of angelic science approaches nearer to that of the Divine Omniscience. We may fairly conclude, therefore, that the concepts of the human intellect are likewise universals, though specifically inferior to angelic

cognitions. This is confirmed by the teaching of St. Thomas in regard of the assimilation of subject to object in all cognition, human, angelic, and Divine. "That the intellectual species," he writes, "and the entities which they represent retain a likeness to each other, may come to pass in two ways: (1) either in that the one is cause of the other; . . . and in this way the Divine and human intellect retain a likeness to the entities represented in the intellect, although in an opposite manner. For the Divine Intellect imprints on an entity the form by which such entity is made like to itself; while the human intellect receives from the entity the specific form by means of which it is made like to the entity; (2) or in such wise that both the one and the other are, from one and the same cause, impressing a like form on each. And it is in this manner that the Angelic intellect is made like to the entities that are the objects of its cognition. For the forms which have been impressed by God on entities for the purpose of their subsistence, have been also impressed on an angel for purposes of cognition."[1] According to the Angelic Doctor, then, the Divine Wisdom and Word is the Measure of all truth in the creature, as being its adequate and only cause; human cognition is measured by its object—the world of being. Angelic cognition occupies a middle place between the two. It is not measured by the world of being, but rather becomes a subordinate measure of the truth of finite being, in virtue of those forms or intellectual species—corresponding with the determinating forms of finite being—which have been implanted in these purely intellectual substances. Limiting oneself, therefore, to the universality of the respective cognitions, it may be affirmed that the Divine Word is one, simple, all-embracing cognition. The angelic words, or internal concepts, are all universals, increasing in extension and intention and decreasing in number proportionally to the higher nobility of the angel. It is natural to conclude, then, that the concepts of the human intellect are likewise universals; and that, as the objects in the two former cases are essences which are absolute universals, so in like manner the native objects of the human intellect are also essences or absolute universals. What an absolute universal definitely is, will appear in the next argument.

An additional confirmation of the same proposition is derived from human language. If we set aside (as we undoubtedly have a right to do) proper names, of all the parts

[1] 2 d. iii., q. 3, a. 3, 2m.

of speech the only one that is *directly and formally* capable of representing individuality is the demonstrative pronoun. I say *directly and formally*, because, indirectly and as though by accident, adverbs significative of time and place may indicate the singularity of the subject of the sentence. For time and place connote existence. With these exceptions, all words in a language are universals; and such is the tendency of the human mind to form universals, that it not unfrequently transforms proper names into common. *Cæsarism, Machiavelianism, Darwinism, Mahometans, the names of Scotch clans,* are instances of such conversion.

The above arguments seem to justify the conclusion, that the formal object of the intellect in its own proper act is a universal. Its acts, therefore, are universal concepts; and its primordial acts, naturally necessary in presence of their object, are *direct* universals. They are intuitions of the essences of things. But, as the primordial acts of the intellect, like those of any other faculty, are comparatively feeble, the conceptual representations of the essence are like the first chalking in of the artistic idea on the canvas; and it is not until after the intellect has by reflex acts returned over and over again to the object represented and tested it by analysis, synthesis, and comparison, that the outline is definitely filled in. Then at length more or less of an equation is effected between the objective essence and the subjective cognition. *Thing* is identical with *being*. When a child uses the word, *thing*, how much does it know of being? Compare such infantine cognition with that complete philosophic concept of being, in which the whole of extension approximates towards the whole of comprehension; the difference between the direct and reflex universal will at once be seen.

(3) Classification—if it is not wholly arbitrary, and then it can hardly be called classification according to the strict acceptation of the term—presupposes a real objective foundation on which such classification is based. But a class is of itself a *relative* universal. This, then, is the fitting place to explain the difference between an absolute and a relative universal. An absolute universal is a universal *potentially* only. It neither includes nor formally excludes individuation. Moreover, it stands (as it were) in its own right, and does not connote a correlative. Take *virtue* as an instance. The concept absolutely represents the essential difference of moral action. It is not individuated, as *this moral action* plainly is, though not excluding the individual but ignoring it. Accordingly, it is *capable* of becoming a universal properly so called,—in other words, it is a potential universal.

Thus, in the proposition, *Virtue is its own reward*, the subject is an absolute (or potential) universal. It is assumed by the mind as a whole of comprehension, not as a whole of extension. A relative universal, on the other hand, is formally such. Accordingly, it positively excludes individuation; and connotes its correlative,—the species or individuals included within its periphery. Thus, *All virtue is either natural or supernatural*, is a formally universal proposition; and the subject, *all virtue*, is a relative universal, connoting the two subordinate species by which it can be dichotomically determined. So much will suffice for a right understanding of the present contention. Now, a class is essentially a relative universal, though after its institution it may be used conventionally as an absolute universal by disregarding its relation to its subordinates. For a class denotes a collection of individual entities, intellectually conceived according to some common basis of similarity. By the fact that it is a *collection* it excludes the possibility of any real singularity; and by the fact that it is a collection of *individuals* it is relative, connoting its relation as a conceptual whole to its subordinate parts or constituent members. All classification of whatsoever kind connotes the classified. But, according to the definition just given, though the universal is not physically real but conceptual, nevertheless, there is a real basis for the classification; since the class is conceived according to some common similarity. To take an instance: In the old Linnean system of botany the classification is almost exclusively derived (as it should be) from the reproductive organs of plants. Therein may be found a particular class, called *pentandria*. This class consists of hermaphrodite plants,—that is to say, of plants whose flower contains both stamina and pistil,—having five stamina or sperm-cells, with distinct filaments not connected with the pistil, or germ-cell. Here the common basis of similarity, which gives birth to the conceptual whole, is clear enough; for all the plants contained under it possess the following properties in common, *viz.*, that the sperm and germ cells exist in the same flower, that each flower has its five stamina, and that these stamina are disconnected from the pistil. These three properties, discovered by experimental observation, are realities which justify the mind in conceiving the various plants that exhibit the said properties as a separate collection. Yet *pentandria* is not the concept or name of a singular plant, but of a certain class of plants. It necessarily is not singular. The naturalist who first discovered these properties in a certain number of different plants and conceived them as on this

account specifically one, may have given to them the name of *pentandria* (that is to say, five-stamina) or any other name he pleased, because he had previously formed in his mind the universal or common concept; but how could the name have taught its first inventor the idea? or what concept could it generate in the mind of the listener, unless this latter had previously possessed the idea? The name would be nothing but an articulated sound symbolical of nothing, and no more human language than the cadences of a snorer, in the absence of the universal concept of which it is the symbol. Hence the usefulness and frequent necessity of the meanings of words in dictionaries. It is not, then, the name that generates the universal concept; but the universal concept that finds its expression in the symbolic name. Neither is the concept a mere logical entity, unrepresentative of anything outside the mind; but it is based on an objective reality.[1]

(4) There is no science, either properly or improperly so called, that has not a universal for its formal object. Irrespectively of the, morally speaking, universal authority of all philosophers up to this comparatively recent period of philosophic anarchy, the truth of the proposition is patent to common sense. If science could have a singular for its formal object, there might be as many sciences as there have been and are individuals. Indeed, the universality of human thought and of the range of the human intellect seems to postulate the existence of these sciences. But in such case the number of sciences would be practically infinite, certainly incalculable; and what could we learn from them? They would add next to nothing to that which is derived from a purely sensile perception of the object,—an individual possessed of such and such determining accidents,—and each object would remain in its own isolation, the subject of an equally isolated thought. Thus human knowledge would scarcely reach the level of the sheep's estimate of a wolf. Further: Human science from a subjective point of view is a habit cognoscitive of the essence of things whether by intuition or by ratiocination.

Such is science, properly so-called, in its most generic signification as inclusive of Divine, Angelic, and human cognition. But the essences of things are the real meta-

[1] The moderate nominalists of modern England,—*e.g.*, Hobbes, Berkeley, Hume, Adam Smith, admit "that perceived resemblance is the foundation of classification". Sir W. Hamilton: *Metaph.* Lect. xxxv., Vol. II. But such an admission looks very like a surrender of the citadel. Nominalism has shifted into conceptualism.

physical forms which determine the species, and are in their nature absolute universals, represented by universal concepts. Again: assuming it from the same point of view in its strictest sense as the demonstrative habit (ἕξις ἀποδεικτική), science postulates universals as its terms; for the three judgments of the demonstrative syllogism must be universal. Yet again: scientific cognitions are necessary, immutable. But a singular object (with but one exception) cannot give birth to a necessary and immutable cognition, because itself is contingent and mutable; consequently, a cognition that should represent it otherwise, would be a false cognition. God is the only apparent exception; but the exception is really no exception. For in Him the two wholes of extension and intension meet. Moreover, He is necessary and immutable Being,—the Source, infinite Continent, exemplar Cause of all being. Once more: Demonstration is the logical form and necessary medium of human science strictly so called. Now, in the parent or most perfect demonstrative syllogism the middle term is the definition of the subject (or minor term) and after a way of the attribute, passion, specific property (or major term). But a definition, properly so-called, must be a universal, because it exhibits a genus as determined by a specific difference to the constitution of the species; and genus, difference, species, are each of them universals. To exhibit the same conclusion under another form: In the perfect demonstrative syllogism with which every demonstration must begin, the subject or minor term is—to speak logically—a species; the middle term or medium of demonstration, the definition of the subject and passion; the major term, the passion or attribute. But all these three terms are of their nature universals. Hence the Philosopher says in his *Posterior Analytics*, that "It is necessary" to the existence of demonstration, "truly to predicate one thing of the many; for there will not be the universal, unless this be so; and if there be not a universal, there will not be a middle term; so that neither will there be a demonstration" (B. i., c. 11). Lastly, all science is essentially unitive from first to last. Even in its preparatory and imperfect stage, while labouring by process of induction to elicit laws and first principles out of the facts of experience and observation, it is reducing individual phenomena under some common law, or evolving therefrom some indemonstrable principle which either lies at the foundation of all certain cognition or serves as the major premiss of the mother-syllogism in some particular science. Thus it commences its work by

gathering up an indefinite number of individual entities into one whole. Now, where induction ends, there deduction, and demonstration in particular, commence. The process of the one is predominantly analytical; that of the other synthetical. Deduction, or rather demonstrative deduction, takes the universal of induction, which scientific intuition now exhibits as an immutable and necessary truth, and fills it in with specific attributes. Induction discovers the whole; demonstration discovers the essential totality of the whole. The former by comparison of like and like as well as by elimination of the unlike exhibits the universal; the latter developes this universal, proving its essential properties by means of the definition as its middle term. Now, throughout this procedure science indirectly lays bare certain off-shoot truths that are as so many hooks linking on one science (*objectively* such) with another,—equal, with equal, inferior with superior. These latter are the subalternant and subalternate sciences; as, for instance, the scientific part of mechanics is subalternated to pure mathematics. Hence we discover that there is a hierarchy of sciences,—such as are inferior yielding to a wider universal and a more comprehensive unity. Is, then, this quest of the human mind after unity of knowledge labour in vain? Is there a hierarchy of sciences without a high priest invested with plenary jurisdiction? Do the mutual bonds of unity suddenly stop short, and leave us in the hands of an oligarchy? Is there no supreme science? The concurrent testimony of Greek philosopher, of mediæval Doctor, of the true philosopher in more modern times, assures us that there is such a science, stretching from end to end of human thought and of the objects of human thought, and that its name is Wisdom. Within the strict limits of the natural order this supreme science is metaphysics. Thus, then, science deals, and necessarily deals, with universals from the first; and, as it progresses, it encounters on its road higher and yet higher universals, till in the supreme science it arrives at the transcendentals which permeate, so to say, all being. Are these universals mere creations of the voice? If so, then all science is vanity; and the only truths if you can call them such, which are not logical fictions, would emerge out of a complete identity between subject and predicate, representable by the now familiar formula,—A = A. But the facts of nature give the lie to so monstrous an hypothesis. In the varied orders of being the inferior is virtually, and in many cases actually, contained under the higher,—simple bodies under compounds, compound bodies under vegetative life, this latter under animal life, animal

life under man, the human soul under the pure Intelligences, all under God as the Supreme, all-containing Reality; not in any case by identity of essence but by an infinite supremacy of Being; after a not unsimilar manner as to the inclusion of the less number under the greater in arithmetic.

(5) I must add in the last place, by way of confirmation, an argument which will not seem trivial to such as have carefully considered the question. Abstract and, generally speaking, universal *terms* are national—that is to say, each nation has its own vocabulary; whereas the *concepts* represented by the terms are œcumenical. But, if the articulated sound were parent of the concept (or of the fiction that would stand for the concept), as diverse as are the words, so in proportion would the corresponding mental figments be diverse. If, on the other hand (as sane philosophy teaches), the concept claims some term that may symbolise and transmit it to others, one can well understand, taking into account the diversity of races and families of men, how a variety of articulated sounds may be made to represent one and the same idea.

To sum up the doctrine evolved in this article, by way of conclusion: The perceptions of sense are singular, and represent an individual existent thing exclusively, as manifested by its group of accidents that are pervious to the sense. Hence, a sensile perception exhibits two things only, to wit, quantity, shape, colour, and other qualitative accidents on the one hand, the collection of these into unity of some sort on the other hand—that act of the *common sense* which collects in one the impressions of each particular sense, and completes the sensile perception. Such perceptions are common to man and irrational animals. But in these *essence* is neither denoted nor even connoted, but only objectively presupposed. The intellectual act represents the same object as an essence, or specific form, which of its nature is an absolute universal. This essence the intellect may represent either as individual, and then its concept connotes existence; or it may represent the same purely as a form, in which case it does not connote existence. Existence predicated answers the question, *Whether a thing is*, and connotes the individual; sensile as well as intellectual perception respond to the question, *What a thing is*, but each in a different way. The perception of sense exhibits what a thing is by its individual accidents only, and as a consequence must be singular; intellectual perception represents the essential notes of the object, and accordingly in its own right (so to say) is a universal; when it includes or connotes

singularity, it does so under compulsion of the sensile perception by which the intellectual faculty was first determined to the representation of such object and of the sensile phantasma which invariably accompanies every act of the human intellect in the actual order. Hence it follows that every concept of the mind in its own native power is a universal. If so, universal ideas are the property of the intellect of man, and begin with the first exercise of reason. These universal concepts, direct and necessary, are concrete; but the human mind from these can form abstract universals, reflex and voluntary, by its faculty of abstraction. Neither the one nor the other class of universal concepts is the formal representation of a *physical* reality, because all things that are physically real are singular; nevertheless each is *metaphysically* real, because it represents the essential notes —really existing in each individual of a group according to a common type—by which every individual entity is determined to its own grade in the universe of created being. These essential notes are the real foundation for the concept, and give to it a universality unlimited by space or time; so that, wherever and whenever an entity shall appear with such notes, it will of necessity be covered by the species, or universal, that exhibits these notes. Such are the internal words of the human intellect; and they postulate a common term as medium of intercommunication between mind and mind. This is in strict analogy with the internal and external words of angels, and more particularly, with the Prototypal Word in the Blessed Trinity. That the intellect of man has naturally such universals as its proper object is clear from the instance of children when they first arrive at the age of reason, from an examination of the parts of speech in all languages, from the specific order of the universe, from the nature of science, from the sensile origin of individual differences. That the universal reflex and philosophical concept is possible, clearly appears from the fact that the human mind has those faculties of abstraction and generalisation which are necessary and sufficient for the production of such concepts. That language cannot give birth to the concept—the external word generate the internal —is an evident deduction from the symbolical nature of language, from the innate deficiency of the supposed cause, and from the fact that universal concepts are common to all men, whereas the terms which express them differ in different languages. Whether these conclusions square or not with the nominalist theory, I leave to the judgment of the reader.

THOMAS HARPER, S.J.

V.—NOTES AND DISCUSSIONS.

MIND AND BODY.

In Mr. Malcolm Guthrie's recent volume devoted to the criticism of Mr. Herbert Spencer's Philosophy, noticed in MIND XXIX. 116, he assigns a considerable amount of space to the "double aspect" expression of the mind; and honours my remarks upon the subject with a share of attention. I have no reason to complain of either the tone or the matter of his criticisms; yet I think some remarks upon his strictures may have a bearing beyond the personal question.

I may premise that in the work of mine criticised by Mr. Guthrie—*Mind and Body*—there are three problems considered. The first is the thorough-going concomitance of mind and body, on which I produced all the evidence that I could command on the affirmative side. This is purely a question of fact; it is, moreover, a practical question of the very utmost importance; indeed, I call it the only practical question, for reasons to be given.

The second problem is—How to state, or express in words, the nature of the connexion. Provided we do not trench upon the integrity of the previous doctrine, I do not call this a practical question; no practical consequences depend upon it. The holders of the most various modes of statement may agree in their mode of conducting themselves as to the management of our bodily and mental constitution. It is not unimportant in itself; but the importance is of a different kind, namely, that we should so express ourselves in all scientific questions as to keep clear of self-contradiction. The history of Philosophy proves that this is sometimes tremendously difficult; and the difficulty has to be met in a way peculiar to itself. We have to pass out of the limits of common speech, and to invent subtleties of language that shall express the facts, and avoid the contradictions. We must still look at the facts, but not in the same way as when we are bent on finding out what they are. We have to provide them a fitting dress; and, for that purpose, may have to take a more careful measure of them than even their first discoverers thought necessary.

The third problem raised in the work in question, is the relationship of our mental workings to the nervous system as known to us. Certain points are singled out, on which hypotheses are framed. The means of proving these are as yet extremely inadequate; and they must, therefore, be estimated by whatever logical tests are properly applicable to hypotheses in that condition.

Now on the first question—the question of fact and of practical application—Mr. Guthrie agrees with Mr. Spencer and myself. His principal quarrel with us both is on the unpractical, but not unimportant question—How shall we put in proper words the connexion of the two classes of facts, commonly called physical and mental, objective and subjective? It is indeed a question of words, but for all that, a great question.

Before endeavouring to formulate in unexceptionable language the relationship of body and mind, I make a reference to one of the current modes, adopted even by thinkers that believe in the thorough-going concomitance; namely, that the mind acts upon the body, and the body upon the mind. To this I object, as assuming the independent existence of the mind. I affirm, on the contrary, that the inter-actions of mind and body are sequences where mind and body are coupled both in the antecedent and in the consequent. A fright depresses and deranges the bodily functions; yet the antecedent fact is not a piece of pure disembodied consciousness; it is a consciousness that would be non-existent but for its being embodied in a series of nervous disturbances; and its efficacy is due to those disturbances, and not to any power that it possesses as a purely subjective phenomenon.

Now for this view of the case, I have employed various forms of language: and these forms Mr. Guthrie would fain make out to be self-contradictory and absurd. He does not seem to consider, that it is a matter of some difficulty to find any expression that may not be objected to; he makes no allowance for the metaphorical character of nearly all the terms that we are obliged to use; he does not himself, except by way of suggested variations, say how the case should be stated; and worst of all, he strains the language used beyond its obvious purport.

In order to avoid the error above spoken of, I introduced the phrase "two-sided cause": a mere condensation of the explanatory remarks as to the inseparable union of the two factors. Mr. Guthrie twists this expression into a variety of contortions; he makes it out to mean or to imply a plurality of causes; he fathers upon me his own interpretation, namely, that the physical side is a cause and the mental side also a cause, which is in flat contradiction to the whole of my explanations, and to any reasonable rendering of the phrase "two-sided cause". If I had meant what he supposes, I should have used a quite different expression, such as "double or conjoint cause," or united streams of causation. Then, he tells us that a "*two-sided cause*" is one of those figures of speech which are the crutches of metaphysics, and enable halting theories to make progress. In point of fact, however, everybody must use figures of speech, for the tissue of language is made up of them; we can but do our best to guard ourselves against their misleading use; we need to explain fully in what sense we intend the words to be used, as I think I have

done in this instance. I have said quite enough to show that the cause is one cause, although that cause is a complex fact; a physical series with a mental manifestation. Body acts upon body; but then it is a kind of body that has mind for its accompaniment; mind must not be dropt out of the phenomenon. It is, I have said, "mind-body giving birth to mind-body"; on which Mr. Guthrie remarks—"The only intelligible position is not contained in any compound word which resolves all mysteries by means of a hyphen". This is as if any one were to denounce the Binomial Theorem as an imposture because it rests upon a cross after every term. A hyphen is an abbreviation for "together with": "mind together with body" is the real antecedent in the supposed case of mental states causing other mental states. I fail to see any absurdity in this mode of expressing the conjunction of the two factors of our being: nor do I catch in Mr. Guthrie's own language any superior form.

What Mr. Guthrie is driving at in his criticisms of Mr. Spencer on this subject, is to obtain an answer to the question, which he puts in various forms—Can feeling be explained by physical antecedents alone? Or, has the feeling anything to do with the result; might this have been the same in the absence of the feeling? Would the history of a physical organism, or of a species, have been just the same without it, as it actually has been with it? The point of these questions, in Mr. Guthrie's view, is their application to Mr. Spencer's Unification of Knowledge, which he is engaged in challenging throughout a great part of his book.

In my opinion, the question, so put, is unanswerable. I would neither answer it myself, nor would I admit the competence of any one else to answer it. Suppose we say, that the physical sequence might have existed exactly as it is, without the feeling or subjective aspect. We should then carry the automatism-theory of Descartes up to man. How can we support this view; on what facts or reasonings can we ground it? There is only one argument that I am aware of, and that is the analogy of the reflex movements of animals, where a series of movements occurs without consciousness; there being a stimulation from without, leading to responsive movements from within. If this particular nervous circle can be completed without consciousness, it is only a question of complication and degree, whether still higher movements might not happen in the same way. The analogy assists us so far, but it is not enough. It might seem to go the length of attesting at least the possibility of our being automatons all through; but we are not sure of even this much; and possibility is a long way off from proof.

Suppose then we say, next, that the higher developments of mind could not have existed without the subjectivity. How can we be sure of this? If we could not affirm the possibility, with any confidence, still less can we affirm impossibility. The only

ground that we are entitled to take up, as to what could have been, is to refuse palpable self-contradictions. If B is plainly implicated in A, then we are not at liberty to say that A could have been created without B : but if there is no implication, we must refrain from affirming what could have been. Now subjectivity is allied with objectivity as a matter of fact, but without any implication that we are able to discover. In our present state of knowledge, we are obliged to say that the two are united, but not necessarily united ; there is neither implication nor causation.

If I were pressed to say which course I would take, under the scheme of Evolution, on reaching the stage when conscious beings arise—Would I follow physical causation solely, or would I introduce feeling as a co-operating factor, as something more than an accompaniment or additional expression of the physical? —my answer would be : I would keep to the physical, and say nothing of the mental, in the line of causation. The physical we could work, if its mere complications were not fatal to anything but the statement of very general tendencies ; but I do not see how we could make an agent out of the subjectivity, keeping to the strict limits of our experience. In our psychological books, we can lay down cause and effect among subjective elements ; sensations giving birth to ideas, to emotions, and to volitions, and these again to other ideas, emotions, and volitions ; but we know that these are not a stream of pure subjectivities ; they have their physical supports, which we may or may not take into our statements. But, in the evolution of conscious beings, we must put the physical in the foreground, and not in the background ; we can record the rise of the subjective aspect with the development of the physical situation, but we cannot even say that the subjective side re-acts upon the other side, and furthers its own development. We assume that, if anyhow we can procure a certain arrangement of nervous and other organs, a subjective manifestation will follow as a thing of course ; while with more advanced and complicated arrangements, there will be an advanced subjectivity.

It is a curious but unanswerable question—Does subjectivity cost anything physically? Of course there must be a series of physical actions, with expenditure or transfer of force ; but these have their physical results, as well as their subjective concomitants. Are these physical results less than they would be if they had no subjective side? We can conceive a mode of putting this to an experimental test, but probably the most advanced means of research may not overcome its difficulties. The position may be illustrated by the case of Light, considered as one of the correlated forces. While Mechanical Energy, Heat, and Chemical Force, have ascertained numerical equivalents, there is as yet no similar statement for Light. The case was put by Thomas Graham in this way. We can convert, say, a pound of carbon

into carbonic acid, in perfect darkness, and we know the precise amount of heat generated: we can burn the same pound of carbon, so as to give off a large amount of illumination. Well then: estimate the illumination, in wax candles, or any other way; measure also the heat evolved along with the light; subtract this estimate from the heat of the other pound that gave no light, and the difference would be the equivalent of the light. Although this operation has not as yet been actually performed, it is manifestly within the compass of our experimental resources, and probably will not be long delayed.

Now the case of nerve force and subjectivity is so far similar. We have nervous actions without subjectivity; and other actions with subjectivity. In both classes there is an expenditure of force, with physical results. The point would be to observe whether the physical results were not, in the case of subjectivity accompanying, the full physical equivalent of the forces expended. The problem is thus quite intelligible; what the answer would be, if it could be actually compassed, no one can pretend even to guess. The difficulty is merely another form of our difficulty in answering Mr. Guthrie's question—Might all the objective phenomena of an animal have been the very same, without the subjective part?

But to return to Mr. Guthrie's criticisms of my language. What I have said is my answer to his criticism of my phrase, "two-sided cause"; which he denounces as metaphorical and unmeaning. I, on my part, could just as easily object to his "double aspect"; he will probably allow that it is not less metaphorical than "two-sided"; while, in my opinion, it is simply a variation of metaphor, safer because conveying less than "two-sided cause"; it evades the attempt to express causation at all. We must depend upon metaphors in any form of language: "double aspect," "two-sided cause," "double-faced unity," are all metaphors; and I cannot see in any one, such an irresistible supremacy, as to entitle it to trample the others under foot. In classifying the theories of the relation of Mind and Body, I employ another variety of wording, *viz.*, "guarded or qualified materialism, saving the contrast of mind and matter".

I have given further offence to Mr. Guthrie, by not resting in the double-aspect, but in going on to a new and unnecessary subtlety, in which I fall back into the slough of obsolete metaphysics. There seemed to me to remain still a difficulty growing out of the contrast of objective and subjective, as the extended and the unextended. Mr. Guthrie scouts this difficulty; the word unextended being negative, he says has no positive meaning; it is an "objectivised abstraction apparently referring to some entity which has no existence". Here he is at issue with the whole series of psychological thinkers since the fifth century. The object world has dimensions in space; the subject world,

pleasure and pain for example, is a real and existing world, yet wants the property of extension. While I am mentally occupied with a tree or a house, I am cognisant of the extended; while I am engrossed with pleasurable warmth, with a sweet odour, or a melodious sound, I have no cognisance of extension. These last experiences are, nevertheless, real; they are not coined or invented by psychologists. The "double aspect" theory is not stultified by drawing such a distinction; if it is, so much the worse for it.

Mr. Guthrie may never have heard of the puzzles of the Schoolmen and others, as to the locality of the mind: these puzzles may no doubt be ascribed to stupidity, but they revealed a difficulty—the difficulty of uniting phenomena that have no extension with phenomena that have extension. I have endeavoured in my own way to meet this difficulty; that is, I have sought to express the fact of union without localising what has no extension. If I had two extended things to join, I could easily express their junction in terms of local position; they would lie alongside, or one above the other, or one inside the other, and so on. But when the one is without extension, the union must be expressed in a more guarded and round-about way. I describe the transition from the objective to the subjective, as when we pass from looking at the sky to the feeling of cold, as a change of *state*; borrowing an expression from a certain theological school, which speaks of heaven under that phrase. Mr. Guthrie is down upon me here, for deserting the paths of science, and sitting at the feet of theologians; as if I could not borrow a term that suits my purpose, without endorsing its application to its original purpose! Mr. Guthrie admits that "the question is certainly interesting: How came the material and extended under certain laws of its own to have a subjective aspect? This is a natural question to ask, but it meets with no elucidation from Dr. Bain's treatment of the subject." Here I thoroughly concur with Mr. Guthrie; neither my treatment nor any other body's treatment has as yet elucidated this question. My aim was entirely different.

It seems, according to Mr. Guthrie, I go still deeper into the mine of mysticism, when in following out my attempt not to entangle the unextended with the extended, by assigning local union, I say that the only union is a union in succession or Time. As a remark by the way, he asks if close succession be union at all? I think it may be well enough, but let that pass. I use this expression, by way of taking extreme precaution in the course indicated:—"We are entitled to say that the same being is, by alternate fits, object and subject, under extended and unextended circumstances." Mr. Guthrie remarks—"This again is not explaining a mode of union nor a change of state: it is merely stating an inexplicable mystery." Now my purpose is to state, and not to explain; I am trying to find language that shall not

be self-contradictory, and, therefore, I go about the bush in this way. The "two aspects," or the "two sides," leave unattempted what I am endeavouring to do; my absurdity may be great, but it lies in my aim more than in my execution. If such a point is to be raised at all, my mode of disposing of it is worthy of being considered; and that is all that I claim in the matter.

Mr. Guthrie spends many pages in criticising my hypothesis of the nervous activities concomitant with our intellectual processes. It is not necessary that I should follow him point by point; I wish merely to show how far he expects what I never intended to give. For one thing, he obviously expects that I should answer the question already put, as to whether feeling is a factor in the nervous sequences that accompany it; a question that I may not have explicitly disclaimed answering; but which I certainly did not give any ground for supposing that I meant to answer. Mr. Guthrie, however, is so completely possessed by this one question, that he cannot enter into any other inquiry apart from it; whatever problem may be proposed in regard to nervous and mental activity, is tested by him under this exclusive bearing. Now, my speculations concerning the nervous processes underlying the intellectual operations, had ends in view totally apart from that. They were addressed to certain difficulties encountered by us, when we compare the known facts of intellect with the known mechanism of the brain. Enough is known on the constitution of the senses and of the nervous system to make hypothesis admissible, and even profitable. Well, there were two things that I felt an interest in trying to do. One was to see if the elements of the brain were numerically adequate to the extent of our intellectual acquirements, on the most obvious supposition that we could make as to the embodiment of these acquirements. The other point was to imagine how the distinctness and isolation of our ideas could be brought about under the received plan of the nervous system. If I trouble the reader with recalling these hypotheses, it is not so much to reply to Mr. Guthrie's criticisms, as with the view of stating the changes of opinion that subsequent reflection has induced on some important points.

My computation of the nervous elements making up the brain —cells and fibres—was probably not very far wrong, as I find eminent physiologists coming to nearly the same estimate. The number of cerebral cells I took at a thousand millions; and, as each cell is connected with one or more fibres, assuming an average of five fibres to the cell, there would be five thousand millions of fibres.[1] These enormous figures would seem adequate

[1] There was, however, an oversight here. Every fibre joins *two* cells, so that the number of fibres should be only half the amount stated, on the supposition of an average of five to each cell.

to our acquisitions, vast as they are, even on the assumption that each cell would undergo but one modification or take a part in only one grouping. For just suppose the case of a man's acquisitions amounting to a hundred thousand (taking some simple type as the unit, say the association of a name and an object, *e.g.*, the sun) which is undoubtedly a large figure,—then, for each one of the nervous groupings involved, there would be available 10,000 cells and 50,000 fibres. This assumes, however, that the nervous mechanism lends itself to an economical distribution of the groupings corresponding to the various associations that make up our permanent stock of ideas.

The attempt to compute the actual number of our acquisitions is of course extremely perilous, and needs a very wide margin. I gave a hypothetical approximation which I supposed to be fairly within the probability of the case, when I took the total of 50,000 for an ordinary mind, and 200,000 for a mind of extraordinary capacity. I do not repeat here the items that make up the total, nor give the data that rendered the fixing of numbers possible; I wish merely to indicate what I now consider the omissions that vitiate the result, showing that it errs on the side of being too little. There are two considerations that I deem of psychological importance, apart from the present speculation.

The first is this. In addition to our fully formed sequences or associations, meaning those that are sure in their reproductive operation, we have a much greater number of partially forged links, which are not devoid of value, seeing that a comparatively small amount of farther repetition can at any time raise them to full efficiency; and, moreover, in co-operation with other weak links, they may attain the full power of resuscitation. I can form no estimate of these imperfect associations, farther than that they must enormously exceed the number of the perfect class. To call them ten or twenty times as many would be a very moderate assumption. They are the associations that are wakened up into full efficiency in the extraordinary excitement of the brain during the delirium of fever.

If we wished to single out the very lowest stages or degrees of acquirement, we should take note of those occasions when, by virtue of the power of similarity, we have the consciousness of repetition in the case of some new impression. A stamp too feeble to be ever reproduced by contiguous association, or to subsist as an idea in (present) consciousness by its own internal coherence, may yet rise up under a present resemblance; the fact being shown by our having the consciousness of identity or repetition. We often say to ourselves, on seeing or hearing something new, "I have the consciousness of having seen or heard that before". When we stop short at this bare consciousness of identity, when we cannot recover time, place, or circumstances, we may be said to have hunted up a former impression of the very lowest degree of coherence, something that perhaps has occurred to us only

once, and with the least possible aids to retention. When we include, in the total of our acquisitions, this very low order of adhesions, the number amounts to something that I can speak of only in the vague terms above suggested. Yet—and here is the pinch—the feeblest impression that possesses a character, or identity, must have a nervous embodiment or grouping devoted to itself.

The second consideration is still more important in the psychological point of view; but would take more space to explain fully. We might suppose that very simple impressions, such as alphabetical letters and symbols would connect themselves with their meanings, and with other marks of the same order, at the least possible expense of nervous elements. Such, however, does not appear to be the case. Very small distinctions, taken by themselves, are impressed with difficulty: and the way out of the difficulty is to convert them into some more complex equivalent. For example, the difference between the two names "*e*fferent" and "*a*fferent," applied to the nerves, is a very small difference both to the eye and to the ear; and we find it very difficult to remember the distinction as so expressed. In one view, there would seem to be an economy of nerve in making it so small; but there is no economy of the retentive power. We find that by a more ample distinction, we can sooner fix the correct associations. We may use various mnemonic devices; all, however, involving a greater area of nervous action. We may resolve the prefixes into their full prepositional forms—*ex*ferent, and *ad*ferent. This gives us the advantage of superior expressiveness; which we should also get by the English forms—*out*-carrying, and *in*-carrying, or by centri*fug*al, and centri*pet*al. But even supposing we had no syllables whose meaning gave the precise distinction, we should find that we should sooner remember the distinction if it were embodied in a greater number of letters,—say, "*is*ferent," and "*ol*ferent," or "*ens*ferent," and "*pod*ferent". In short, there is a certain pitch of complication and plurality that is needed for easy retentiveness; and the exaction of nervous matter for the embodiment does not seem to impoverish our capabilities of acquirement. The greater the number of accessories to any fact, the better seems our hold of that fact. In the case of the fine distinction already instanced, I can suppose another way of impressing it. If we were to hear the words for the two sets of nerves markedly pronounced by a lecturer, while on a diagram he indicated the two contrasting directions, the complicated situation would impress itself at once; we should remember the distinction by reverting to the whole scene, and the action of the lecturer; which, however, would seem a very costly process. Yet so it is, we can afford à very great number of these recollections where simple impressions are aided by complex accessories. It often astonishes me to remark the amount of local surroundings that attend the recollection of very small things. The names

that we best and soonest remember are remembered in connexion with definite scenes, and with persons in the act of pronouncing them. We seem to be able to imbibe these surrounding circumstances without any limit: and to prefer a complex object that takes hold of us at many points, to a simple object that takes hold at very few. The brain appears never to want room for the most variegated objects; our difficulty is to secure a connexion in the absence of variety and abundance of accessories. There must be some limitation here: but it is not easy to state it. It is much the same case as the almost indefinite power of accumulating local memories. We know that this cannot go on for ever: but the strange thing is that our failure does not seem to be due to the deficiency of nerve-elements. For example, no memory could hold the monotonous streets of London; but let the same number of streets be varied in their aspects, let them be presented with sensational accessories, requiring more brain to contain them; and then we could carry the recollection to a much greater length. To combine interesting accessories with objects to be learned, is a well-known art of memory; and we have never yet been able to say at what point the practice is abused and defeats its own end. The obvious mischief that it does, is to stand in the way of working with generalities; we become the victims of too much individuality and concreteness. There must be a medium position, which it would be of consequence to define; where the accessories are enough for easy retentiveness, and yet not needlessly voluminous, so as to crowd the brain, and contract its capacity for acquisition generally. It would be easy to impress a hundred facts of any natural science, but a tolerable mastery of the science would need many thousands of associations; and the means of providing costly accessories must at last come to an end.

Dwelling upon this point, I become appalled at the number of nerve-combinations seemingly necessary, and am led to consider the estimated number of cells and fibres as little enough, except on a farther assumption that I will advert to presently. I have endeavoured to indicate the only way that we can conceive of the isolation of our various acquisitions. It has to be considered that each simple impression on the sense has a different response according to the other impressions that accompany it; a with b gives response x; a with c, y. There must be a certain place where the communications with a encounter the communications with b; and that place of encounter is the source of outgoing action expressed by x. It is the number and the complicacy of those meeting-places that render the demand for nervous elements so imperious. The other case that I have dwelt upon is variety of *degree* or intensity in the same nervous line; a weak impression gives one response, a stronger, another. There must be distinct embodiments for all the gradations that we are conscious

of, as shown in the distinctive actions flowing from them, or the distinctive linkings in the sequences of thought.

I am now brought back to the question—Is it likely that the fibres and cells, as we recognise them by the microscope, serve each for a single line of communication, or do they admit of a plurality of communications, all held distinct? This opens a vast possibility of enlargement of our nervous storage; but it is difficult to conceive, and still more difficult to prove. The more that the number of our acquisitions is studied, the more desirable it will seem to have this outlet. It is easy to talk of having thousands of fibres and cells for a single acquisition, say the name and the thing seen; but simple as these two elements appear, a very large number of ultimate fibres must be concerned in the support of each. A single alphabetical letter, whether sounded or written, is a complicated impression to begin with; and in the unions that make words, the complication increases almost in geometrical progression. So, a circle, of one definite size, is simple, as among our acquisitions, but highly complex as a nervous effect.

Mr. Guthrie expends upon the foregoing nervous hypothesis several pages of criticism which it would be too long to follow in detail. I will single out what seems to be his strongest objection, and in fact summarises many of the others, namely, that while I provide a nervous embodiment for two of the fundamental facts of Intellect—Discrimination and Retentiveness—I say nothing of the third—Identification or Similarity. To this my reply is, that what I have done is not in anyway invalidated by the omission, unless some one could show that there was an absolute incompatibility between the scheme of Retentiveness and any possible mode of embodying Similarity. I am not aware, however, that there is any such incompatibility; nor do I think it impossible to give a hypothetical rendering of the nervous operations connected with the attraction of like for like. The expression would not be very easy; and, seeing that the whole attempt is venturesome and precarious, although not illegitimate, I am content to stop short with Retentiveness, which I consider by far the most important stretch, and the one that involves the greatest compass of hypothetical assumption.

A. Bain.

ON THE ENGLISH OF *DING-AN-SICH*.

The phrase *Ding-an-sich*, which plays such an important part in German philosophy, is usually rendered in English by 'thing-in-itself,' or more frequently by the plural 'things-in-themselves'. The usage has prevailed so long and so widely that perhaps it is vain to protest against it; yet one may pluck up

courage to do so on considering how very bad the phrase is—bad translation, bad sense, and bad metaphysic. On all these grounds 'thing-*by*-itself' seems preferable, and accordingly I have sometimes ventured to employ the latter expression in the pages of MIND.

First as to the mere question of translation: it is not necessary to pretend to exact and authoritative German scholarship; for the best dictionaries are open to all who are strong enough to lift and open them, and upon them I propose to rely. The point at issue is clearly the English equivalent for the German *an:* does it ever mean the same as our 'in'? According to Hilpert, *an* with the dative (which is all we need consider) is variously equivalent to 'at,' 'on,' 'by,' or 'as to'; though the phrase *an meiner Stelle* is rendered 'in my place'. *An*, therefore, though in the great majority of cases rendered otherwise, may sometimes be used as we sometimes use 'in'. But, according to Grimm, the German *an* and *in* (which last commonly corresponds to the English 'in'), though allied, differ in this, that "*an* bezeichnet die Oberfläche, *in* das Inwendige". Whence we may infer that primarily *an meiner Stelle* does not mean 'occupying the same position and outline of cubic space,' but refers to the ground or seat occupied, so that the *an* might be more logically translated 'at' or 'on'.

The particular phrase *an sich* is given by Grimm as equivalent to *per se*, of which it is probably a translation; and *per* is to be rendered (as we may learn from Dr. Smith) 'through,' 'by,' or 'for'—rarely 'in,' and perhaps never 'in' with its most appropriate sense, where 'by' or 'through' would not serve as well or better. But *per se* is not always translated into German by *an sich*. The third definition of Spinoza's *Ethica* runs:—*Per substantiam intelligo id, quod in se est et per se concipitur: hoc est id, cujus conceptus non indiget conceptu alterius rei, a quo formari debeat:* and Kuno Fischer, commenting on this, renders *in se* and *per se* by *in sich* and *durch sich*. Spinoza's context (and the history of Philosophy) shows that it is the independence, apartness, self-sufficient isolation of substance that is signified: for in this respect it contrasts with attributes which are relative to substance, and with modes which are relative to something else. Casting out, then, any mystery that may attach to *per*, or *durch*, or *in*, whether Latin or German, Spinoza's "*in se est et per se concipitur*," may be Englished—'exists by itself and is conceived by means of itself, *i.e.*, apart from or independently of anything else. Why *per se* could not here be translated by *an sich* may presently appear.

Leaving the question of translation, we have next to consider what is mere good sense in the use of English: is there anything of that sort in the phrase 'thing-in-itself'? Here again the discussion turns upon the meaning of 'in'; and as that varies with different contexts, we had better have recourse to Dr. Johnson. He begins unpromisingly by deriving it from the Latin: if we

neglect that, his first meaning is 'the place where anything is present,' as 'in school'; but 'thing-in-itself' does not mean thing-inside-itself, nor occupying its own place, since it is generally supposed not to have any. Johnson's second meaning is 'the state present at any time,' as 'in very deed,' 'in friendship'; and this seems most nearly in point: I will return to it. His third meaning is 'to note the point of time'; but the 'thing-in-itself' again is not supposed to be in time. The fourth meaning relates to power, the fifth to cause; but though *per se* often has such references, they rarely attach to the phrase we are considering: and the Lexicographer's other meanings of 'in' are still less relevant.

In-itself-ness or *Ansichheit* seems usually to signify, if anything, the way in which something is considered: so that, returning to the second meaning of 'in' mentioned above, we may understand by 'thing-in-itself,' 'thing considered in its own nature'; though even then 'as or according to its own nature' would be easier to understand. But again, since 'in its own nature' is ambiguous, possibly meaning either phenomenally or noumenally, and as noumenally is of course intended, the full expansion of the phrase would be 'the thing considered in its own nature and not as it appears to us or forms part of consciousness'; an unwieldy expression certainly, but serving to bring out the meaning of 'thing-in-itself' as pointing to existence apart from consciousness; and, if so, 'thing-by-itself' will convey the meaning better. We now see why Spinoza's *per se* in the above extract should not be rendered by *an sich*. Spinoza conceives substance in its independence positively: but the manner of conception implied by *an sich* is negative; it is merely the negation of consciousness.

A transition so insensible from a question of good sense to one of good metaphysic could hardly have been expected, did not these regions lie nearer together than is commonly thought. *Ding-an-sich* is the symbol of a supposed existence whose reality modern idealism disputes: the nature of that supposed existence in relation to idealistic metaphysic is strongly marked by the translation 'thing-by-itself'; by 'thing-in-itself' not at all. It is often, I believe, a long time before a student learns to use 'thing-in-itself,' in the right sense, and meanwhile it seriously impedes his apprehension of the doctrines with which it is connected: for a good technicality is like a lamp in a dark thoroughfare; but a bad technicality emits a tenebrific radiance and deepens the obscurity. The natural and usual suggestion of 'thing-in-itself' is probably of a mystical character: no one idea is formed distinctly, but many irrelevant ones are stirred, and the conflict and mutual destruction of these inchoate representations leaves a sort of blur in consciousness, as the strife of hot, cold, moist and dry with their embryon atoms maintains the reign of chaos. Some readers may remember to have had such associations with the phrase, as I confess once to have had; but those who have

had no such experience will vainly try to construct it from the accounts of others. It baffles all articulate description: like Bottom's dream, it is past the wit of man to say what dream it was. We may fairly doubt if the first introducer of 'thing-in-itself' had clear notions about modern idealism; or he may have been one of those who prefer their metaphysic puddled, according to a wide-spread persuasion that a little philosophy dispels a mystery but the higher philosophy restores it. But those of a different persuasion may perhaps think that 'thing-by-itself' is good metaphysic: we have seen that it is good translation: and if it is not very good sense, it comes as near it as is permitted to the name of a nonentity. Or is it more consistent to retain 'thing-in-itself' as one absurdity to denote another?

CARVETH READ.

IS THERE SUCH A THING AS PURE MALEVOLENCE?

This question is one of a number of important and interesting topics which Professor Bain has discussed in MIND XXIX. He combats on this point the opinions of Professor Grote and Mr. Stephen, and maintains against them the existence of pure malevolence. And by this I understand him to mean that malevolence is not a derivative passion, but has been from the first, or at least is now, one of the original elements of our nature. The subject is one of very great importance. As Professor Bain has pointed out, the consequences of such a view reach very far. And when we consider the weight which in matters of psychology deservedly attaches to the writer's opinions, I cannot but think that on this ground also an answer is due. I could have wished that some person more qualified than myself had attempted a reply; but, in order that silence may not seem an admission, I feel called on to give a reason for the faith that is in me, and for my entire disbelief in Professor Bain's conclusion. It will be, I think, more convenient if I treat the general question and do not reply controversially on every head.

Let me say first what I take the issue to be. The question is *not*, Is there *real* malevolence? That exists and is a clear and palpable fact. It is impossible to deny that cruelty can give pleasure even when there is no ulterior object and aim. And this fact can certainly not be explained *away*; but then that is not the question. The question is whether it can be explained and derived from known laws and elements of human nature.

I must begin by confessing that my mind is biassed. Even if I did not see how to account for malevolence, I do not think I could conclude that it was original. The double presumption that weighs against it would force me, I think, to suspend my judgment.

The first ground for suspense would be my inability to give

this passion its place in human nature. It entirely declines to pair off with benevolence founded on sympathy. For we not only see that, as a matter of fact, the perceived pain of others is painful to ourselves, but we also see how and why this *must* be so. The fact follows from the first principles of psychical life. But pure malevolence would seem a thing quite by itself, a foreign germ dropped from outside into our system.

This consideration makes me biassed, and there follows another which carries great weight. If a human passion claims to be original, it should show itself present in the lower animals. But what animal is cruel for the sake of cruelty? The accusation has indeed been launched against the cat (Romanes, p. 413), but in this one point that guilty animal is innocent. There is not the smallest reason to credit it with a knowledge of the pain it inflicts, or with the idea of prolonging life to lengthen torture.[1] Add the desire for play to the appetite for slaughter, and all is explained. And if further the monkey is included in the charge, then I should see in the appearance of the passion so very late in development a proof that it was developed and hence presumably explicable.

But I do not feel obliged to fall back on these presumptions, since the passion can actually be analysed and explained.

I do not wish to reproduce in detail the excellent remarks made by Mr. Stephen and Professor Grote, but will briefly set down the chief materials that are offered for an explanation, and will then enlarge on one important point. We have in the first place the feeling of wrong, the identification of my comparative failure with another's happiness, and the consequent wish to remove the latter. And under this head we may set down envy and jealousy. We may add that if anything is a source of pain to me, that may generate hate and the desire to remove this source of pain by retaliation. Then we have the latent self-gratulation on our own security, which tends to make pleasant the view of others' disaster. And again we have another origin of pleasure in the excitement of the senses and the imagination which comes from violent sensations. Mr. Stephen has done well to lay great stress on this fact (*cf.*, Horwicz, *Psychologische Analysen*, II. ii., s. 322), and I do not see how it can be called in question, or itself in every case reduced to malevolence. When the vessel is among the breakers and the life-boat in the surf, who but hastens to look on, and yet who wishes ill? What malevolence underlies our fearful delight in the supernatural, our passion for adventure, and our love for the perilous contrasts of gambling? At least among human beings we find a genuine "hunger for

[1] A case was reported to me of a cat, otherwise effective, who was useless as a mouser because his habit was, having played with his mouse until weary of the pastime, then to let it go unhurt. Was this animal malevolent? And, if not, why any other?

change and emotion"; and, whatever in the end we may think is the truth of it, it seems as if, within limits, all heightening and expansion of our 'self-feeling' were pleasant. Nor is it any answer to reply that pain becomes predominant when those limits are overpassed, or when *other* conditions are added.

These known affections of our nature do clearly all contribute to make malevolence, and yet there is another point which I think is essential.

We shall all admit that there exists a love of power. And by this I do not mean the mere pleasure which comes from energy put forth, but the delight in self-assertion and the wish to increase the area of our control. I am not offering these phrases as a theory of the passion but as a description which may point to an evident fact. There is a desire in human nature to widen the sphere which it can regard as being the expression of its will. And this desire has no boundary. Now the mere existence of another man's will, which is independent of ours, is a limit to this desire, and in consequence we aim at the removal or diminution of that check to our sovereignty. How remove the limit? The limit is removed by the subjugation of the other. We must make him a material for our self-assertion, in other words, we must work our will on him. But how be sure that we do this? His submission is not enough, for his submission may be willing, and he still keep in reserve an independent choice. We work our will on him when he struggles ineffectually, and when we force him to that which he most dislikes. In this way we efface him as a boundary to our power. But why not kill him? Well, perhaps he is useful; and, apart from that, killing must make an end, and the end of him is the end of our mastery over him. We have our will of him most by keeping him in the state which he most longs to escape from. In this devilish extreme of wanton cruelty we have, I presume, got as far as malevolence. We do desire the other's pain, because only by his pain can we make an utter sport and plaything of his will. But even here we do not desire his pain simply and as such. Even here there is a positive ground for our cruelty, and our malevolence is never and could never be *pure*.

This explanation may be confirmed by the reflection that torture inflicted by a third person, who is not our agent, lacks a great element of pleasantness. No doubt we here may sympathise with the torturer, and so get pleasure; but a tyrant, speaking generally, would care little to see the cruelties of a neighbouring tyrant. The malevolence which would take delight in the quiet and passive starvation of the unoffending, would be an abnormal product.

Still even that disease could be readily explained. The misanthrope, to whom the sight of abject misery would bring joy, would be a man who for some reason hated his race, was aggrieved by it, and in its misfortunes felt his own depression

repaired and his self-assertion restored. Where I hate I desire the diminution of that welfare which pains me by expressing the source of my pain. And my hatred may lead me to the cruelty of desiring the constant recovery from a constant smart, and the luxurious alternations of a morbid appetite. But even here we have not got *pure* malevolence.

With the above principles in our hands we might confidently approach the pathology of the subject, but I prefer to call attention to an additional source of pleasure in evil. We are said to be gratified by our friend's misfortunes. That is true, but we should make an important distinction. The lingering disease of a friend would not be pleasant unless it called forth self-felicitation. What is pleasant is a sudden and exciting mischance. The excitement falls under a principle we have described, but the suddenness appeals to our sense of the ludicrous. Now even if we follow Professor Bain (as for myself I cannot) in reducing the comic everywhere to a perceived *degradation*, that is very far from establishing malevolence. For the degradation must imply a degrading *power*, and our pleasure would lie in thus feeling our own self-assertion increased. I think that Professor Bain would find it difficult to verify the presence of malevolence in *every* species of the ludicrous. When we laugh, for instance, at an absurd child's doll, do we do so from a latent *odium generis humani?* And, if malevolence is to be imported into the sense of the comic, are we to find it at the root of our joy in the sublime and of our pleasure in resignation?

I would add one word more on the delights of angry temper. Where this is not retaliatory and *therefore* remedial of our own wrong, it can easily be explained by our love of excitement, and explained again by our desire for making ourselves felt, and for swelling at the expense of those around us. In something of the same way we all cling to our wrongs, for they keep us for ever in mind of our rights, and we hug our hatreds since without them how little would be left to some of us. Our positive self-realisation, whether normal or morbid, is still the end of our being. The devil that but denies, the malevolence that is pure, is no mere ethical monster. It is monstrous too psychologically, and, despite Professor Bain's warnings, we must take heart to say that it is not possible.

The reader, I think, can now judge for himself how I should deal with the remainder of the instances adduced; and, while admitting the difficulty of some special applications, I venture to think that the origin of malevolence can be satisfactorily explained.

F. H. Bradley.

OUR RIGHT TO REGARD EVIL AS A MYSTERY.

It appears to me that Mr. Bradley's remarks on this subject in MIND XXX., p. 258 ("Is Self-sacrifice an Enigma?"), pass too lightly over one element of this question. He recognises the conviction that moral agents are bound to struggle against evil, to use all efforts to remove it; but he implies a denial, at least so I read him, that any conviction as to the possibility of success is implied in the state of mind which enables the struggle to be kept up. I am well aware how easy it is to misinterpret an elementary moral belief into a speculative proposition. If I hazard an interpretation and criticism of such a *de facto* persuasion it is in the hope that by comparison of views something reliable may be elicited.

It appears to me that the attitude of a human, *i.e.*, moral and intellectual, agent towards the world implies some ethical conviction regarding the nature and capabilities of the world. I mean more especially in reference to the capacity which the world has of being turned to good ends or freed from evil. Am I wrong in being influenced at this point by the analogy of knowledge? The ethical postulate which appears to me present in all moral action is very like, perhaps fundamentally one with, our ineradicable conviction that knowledge can be extended. I shrink from speaking of "the universe as a whole"; but I think that it was a little joke of Mr. Bradley's to require that we should do so or else be surprised at nothing. Ontology is in bad repute, and, I had always imagined, deservedly. But taking the universe to mean what is accessible to us, and assuming the constancy of our intellectual and moral nature, I do not see my way out of believing that we are bound to deal with the universe, and in so dealing to think of it, as knowable and as indefinitely capable of good.

Then it seems to me that common feeling, finding, as it fancies, this persuasion fulfilled on the whole in knowledge, and unfulfilled on the whole in practice, does well to be puzzled. If it interprets its *de facto* persuasion into the dogma that "the universe is a harmony" (which as I understand the proposition I see no great risk in doing), then it feels a sharp contradiction, unparalleled in other spheres of life, between this dogma and the course of things.

If it does not assume the dogma, but restricts itself to its *de facto* persuasion, then the non-assumption of the dogma is an admission of chaos into the universe as accessible to man, which *seems* in direct contradiction with the *de facto* persuasion. *Is* there such a contradiction? This depends on how we interpret the persuasion. It appears to me to say, or rather to postulate (for I am not relying on an innate idea, but on an interpretation of conscious activities), that while we act we must believe that some good can be effected. Virtue in despair is possible for the crew of a sinking ship, and, indeed, the trained consciousness

would, we hope, always maintain its character. But I do not think that action, as apart from the merest momentary endurance, can go on without the conviction I speak of. For it is upon it, in concrete and detailed shapes, that the guidance of action depends.

Is there then in common experience a contradiction to the belief that some good can be effected? I do not think so; but common feeling confuses (if I may say so) the effecting of good with the positive removal of what it is trained to call evil; and then finds that good, though not unprosperous in detail, seems even to be the seed of evil in the world as a whole. There can be little doubt that thus far civilisation has conferred a reproductive power on much that causes suffering and affords occasion for self-sacrifice. No one could venture on a proof that evil diminishes in quantity; and the break-down of many well-meaning short methods with evil leaves the impression of failure strongly on us just now.

If there was a contradiction or conflict *for us* in the existence of evil, should we be justified in reading it off into "the universe"? I must answer that I can see no hard and fast line between us and the universe. A contradiction which we cannot even begin to get over seems to me to be *ipso facto* a contradiction in the universe; *i.e.*, when we regard it to the very best of our power *ex analogia universi* it is there still. It seems to me simply idle to say that the best of our power does not amount to much. To ask why there should not be a contradiction which we can not get over seems to me to be asking why we should expect a truth to be true. I could only say that *ex vi termini* it is a truth, and that having used my best endeavours I could not get rid of it.

Do I agree with common feeling that undeserved suffering and self-sacrifice are a mystery? *Yes, unless we can see how they are not evil, i.e.*, not antagonistic to good life, which is all that my persuasion demands. I do believe that on this question much may be learnt by looking facts in the face, and by not assuming that our ethical postulate in its first crude form is to govern our whole ideal of life. The moral duty of trying to do away with suffering and with the occasions for self-sacrifice is undoubted, at least as things are now. The moral ideal, that we should expect and desire that everything of the kind should be removed, seems to me less clear. *I* only said our *de facto* persuasion was that some good could be done. Whether this good must be proportionate to the removal of what is called evil I do not know. But perhaps by wider and less biassed consideration something might be done in the way of seeing through the alleged contradiction, not merely carting it away. Can any one construct an ideal of life, destitute of suffering and self-sacrifice, which he does not shudder to contemplate? As a mere illustration, I will say that Mr. Bradley's instances of what we should all desire if we could have it seem to me *in the concrete* most unattractive. I

say in the concrete; of course, features could be taken out of them which if possible would be desirable. I am not saying that no one can imagine a better world than this; I am only saying that the extreme difficulty of doing so shows what unexpected elements seem essential, when we reflect, to make life worth having. I do not know whether it is below the dignity of philosophy to refer to Dickens's *Haunted Man* on this subject; I think it contains an idea that is worth attention. To take one case: must not all great art die if common feeling could realise its ideal of removing "evil"; and must not even the appreciation of the great art of the past die too, when the living experience of suffering is gone? "*Haec olim meminisse juvabit*" cannot point to a permanent frame of mind, and the frame it does point to is, I think, unhealthy. And granting that civilisation tends to elevate and refine suffering, to make it moral rather than physical, is there any tangible tendency to diminish its amount? *Amount*, indeed, has but little meaning; and yet the comparison thus suggested is wholesome to dwell upon, and can with care be brought to some results. Is not our *actual* ideal, if we look straight at the matter, rather to make everyone we can a moral agent, instead of a brute or a slave, than to make them either good or happy? I see no sign that progress will do the latter, in either term; but there is some little sign of its doing the former, and I believe we are all glad of it by itself. Admission to be actors in the moral drama seems to me to be what we practically expect for mankind from progress. The drama will no doubt become more complicated, we may hope, nobler. I see no reason to suppose that it can go on without suffering and self-sacrifice, nor, as I have said, can I honestly, with my present lights, desire that it should.

But Mr. Bradley may say: 'Well, then, you do accept the conflict, which we feel, as no more mysterious than any other fact'. I can only reply: I cannot deny that it seems to be a fact, but I maintain my right to be puzzled by it even more than if I could not make the sum of the angles of a triangle right in practice; to sympathise with common feeling in its perplexity; and to be sharply on the look-out for anything that may mitigate the contradiction by including more and more of the universe under the head of what is not evil, *i.e.*, of what is contributory or not antagonistic to good life.

B. Bosanquet.

KANT'S VIEW OF MATHEMATICAL PREMISSES AND REASONINGS.

I have read with much interest Mr. Monck's note on "Kant's Theory of Mathematics" in the last number of Mind; and so far as his observations are a reply to a portion of my "Criticism of the Critical Philosophy" in the January number, I shall be glad briefly to answer them. And since the only part of Mr. Adam-

son's strictures on my article which, in my opinion, calls for a reply is that which relates to the subject of Mr. Monck's note, it appears most convenient to make the same rejoinder serve for both my critics.

I must begin by guarding against a misapprehension into which they have both fallen; for which, however, I am quite willing to take the blame. They both suppose me to hold that $7+5=12$ is not a synthetical judgment: Mr. Monck even supposes me to affirm that "arithmetic does not contain synthetical judgments". I did not affirm either of these propositions; nor did I intend to imply or suggest either, or to raise any issue except that to which I expressly addressed myself—as to the consistency of Kant's statements on the subject. And I must adhere to this position; not because I have any reluctance to state my own view on the point in question; but because, first, my view bears no such relation to Kant's as would enable me to express in it his terminology without lengthy explanations; and because, secondly, I am anxious to keep the question, whether Kant's distinction of 'analytical' and 'synthetical' propositions is carefully thought out and consistently applied by him, quite distinct from the question whether I can produce a better classification. I am quite aware that criticism—"with a small *c*"—is easier than construction: but it is only this humbler task that I have proposed to myself on the present occasion.

Let us return, then, to the narrower question. Kant says that $7+5=12$ is a synthetical proposition, and that the distinction between synthetical and analytical propositions is fundamental: I contend that $7+5=12$ can be shown to be an inference from propositions which Kant cannot consistently deny to be analytical; since its converse may be deduced from the definitions of the numbers from 12 to 5 inclusive ($12=11+1$, &c.), by the aid of the general axiom, 'The whole = the sum of its parts taken in any order'. To this particular contention Mr. Monck, though he does not admit its validity, does not appear to offer any reply. I turn, therefore, to Mr. Adamson, who thinks it "sufficient to say that[1] . . . reversal of the series of numbers is only possible on ground of the previous series of syntheses by which they have been generated, and that an axiom which explicitly contains the mark of intuition—'taken in any order'—can hardly be declared analytical in Kant's sense of that term". Both these answers surprise me much; since I should have thought that the first of them could only be regarded as relevant by a writer ignorant of one of Kant's most important doctrines, while the other is inconsistent with his express statements on the subject of axioms. To take the former first—I say that I do not see how Kant can deny that $12=11+1$

[1] I have omitted one sentence which relates to my supposed view that $7+5$ is not a synthetical proposition—a view which, as before said, I have not expressed.

is an analytical proposition: Mr. Adamson answers that is only possible on ground of the previous synthesis by which 12 has been generated. But how can this affect the question, since, according to Kant, every analytical proposition is only possible on the ground of a previous synthesis, as "the understanding cannot analyse except where it has previously combined"? I find it difficult to suppose that Mr. Adamson has even temporarily forgotten this fundamental doctrine of the 'Transcendental Analytic': and yet on any other supposition his answer seems devoid of any appearance of relevancy. As to his second point, that "an axiom which explicitly contains the mark of intuition cannot be analytical in Kant's sense," it is sufficient to quote Kant's own account of axioms which he expressly states to be analytical: "Dass Gleiches zu Gleichem hinzugethan oder von diesem abgezogen ein Gleiches gebe sind analytische Sätze, indem ich mir der Identität der einen Grössenerzeugung mit der andern unmittelbar bewusst bin". Here what Mr. Adamson calls the "reference to intuition"—that is, the reference to the process of forming or combining quantities—is certainly no less explicit than it is in the numerical axiom stated by me.

I turn to the distinction between philosophical and mathematical cognition: and here again I must say that both my antagonists appear to have considered rather what Kant ought to have meant, than what, in the passages to which I referred, he has actually *said*. He says that mathematical cognition is distinguished by being cognition "aus der Construction der Begriffe," and that for the "Construction" of a "Begriff" we require a non-empirical "Anschauung," which accordingly as "Anschauung" is an "individual object" by which a concept is represented *in concreto*"; and again that mathematical cognition contemplates "the general in the particular, nay, even in the individual". Reflecting on these statements, I ask myself what they can mean in relation to algebra: and reading on, I find that Kant says that in algebra the construction is not "ostensiv" but "symbolisch" or "charakteristisch," the relations of quantities, and the operations by which they are produced and modified, being represented "in der Anschauung" and placed "vor Augen" by means of symbols. The only meaning I can give to these statements taken together is that the "individual object" in the case of algebra is the symbol. I am not surprised that my Kantian critics should protest against this view, as it certainly reduces Kant's distinction to something like an absurdity: but I venture to think that they entirely fail to suggest any other tenable interpretation. Mr. Monck apprehends Kant's meaning to be that, "though the x's and y's are only symbolical representatives of quantity, their *relations* are exhibited in intuition". But surely the relations must be as general as the quantities related: neither the one nor the other can be the individual objects which intuition, in Kant's sense, involves. Mr. Adamson suggests that I am wrong in

regarding "the mathematical intuition as a single definite object and not as a schema"; which, however, he tells us is "concrete and individual". Here again I am at a loss to conjecture how Mr. Adamson professes to reconcile his view with the plain statements of his author. Mathematical cognition, as I have just quoted, requires an "Anschauung" which is an "einzelnes Object": whereas in the passage where Kant explains his "schematism" the schema is expressly said to be "keine einzelne Anschauung," and is thus contrasted with the "Bild" which is capable of being presented "*in concreto*". Again, Kant tells us that mathematical cognition proceeds by construction of concepts; and, according to him, "I construct a triangle by representing the object corresponding to that concept either by mere imagination in pure intuition, or afterwards on paper also in empirical intuition": whereas the schema of a triangle "can exist nowhere but in thought". And further, how could Kant possibly have made the presence of the schema a *differentia* of mathematical as contrasted with philosophical cognition, when half the chapter on the schematism of the pure understanding is concerned with philosophical as distinguished from mathematical conceptions? I am afraid that Mr. Adamson has forgotten that Kant includes under the term "philosophical cognition" the non-mathematical principles of Rational Physics.[1] And I am almost afraid that Mr. Monck has forgotten it also; since he asks, with the air of expecting a negative answer, "Have we [in Philosophy] any original synthetical premisses to start from?"

H. Sidgwick.

The Editor having shown me the preceding Note by Mr. Sidgwick, I here, with his permission, append a few words, as it is best that a discussion of this kind should be brought at once to a close.

In reference to the question of the synthetical character of arithmetical propositions Mr. Sidgwick quotes an important doctrine of Kant's ("that the understanding cannot analyse except where it has previously combined") as decisive in favour of his criticism and only to be disregarded through ignorance. I cannot plead ignorance of this doctrine, for I have elsewhere called special attention to it, but even the knowledge that Mr. Sidgwick thinks it in point does not enable me to see its bearing on the precise question in dispute. Kant does not employ the expressions "presence of synthesis" and "synthetical character of a judgment as synonymous," and the inference implied by Mr. Sidgwick's use of the passage—that all judgments are at once synthetical and analytical, whatever be its truth, is hardly part of Kant's teaching.

On the statement that reference to intuition is the ultimate mark characterising synthetical judgments, Mr. Sidgwick quotes an expression of Kant's respecting the principle of equality—a principle which in de-

[1] See, among other passages, *Prolegomena*, § 15; where he speaks of the "bloss discursive Grundsätze (aus Begriffen) welche den philosophischen Theil der reinen Naturerkenntniss ausmachen".

fiance of his author (see *Kritik d. r. V.*, p. 157, Hart.) he calls an axiom. In view of Kant's precise declarations on this point, for which I refer generally to the discussion in *Kritik*, p. 480, and especially to the paragraph on p. 482 beginning "Wenn man von einem Begriffe synthetisch urtheilen soll, so muss man aus diesem Begriffe hinausgehen, und zwar zur Anschauung," and his teaching on the relation between such analytical principles as those of equality, whole and parts, and the synthetical propositions of mathematics (see *Kritik*, p. 44), no weight can be attached to the quotation, nor should the term "Grössenerzeugung" be understood as apparently is done by Mr. Sidgwick.

In regard to the character of the intuitive element in mathematical reasoning,—whether or not that, according to Kant, is the schema, Mr. Sidgwick advances a general argument and some special quotations. The general argument is, I think, based on a misunderstanding and is beside the mark. Though schemata are involved in mathematical reasoning, it would not follow that schematism was confined to mathematical thinking. Kant has expressly treated of the distinction between the use of schemata in mathematics and in philosophy, and I am not aware of having said anything which could warrant the application to me of Mr. Sidgwick's argument.

The quotations introduced here by Mr. Sidgwick seem to me misleading. The schema, according to Mr. Sidgwick, is expressly said to be "keine einzelne Anschauung". The phrase is, I suppose, from *Kritik* p. 142, but it is a mere fraction of a complete sentence which as a whole contains nothing to warrant the reading here taken. The "Bild," moreover, is far from being the only means of representation *in concreto* (see, among other passages, *Kritik*, p. 551). The next quotations, the first of which does not seem a very precise rendering, are likewise parts of sentences. Were the sentences (*Kritik*, p. 478 and p. 143) translated in full, the supposed contrast would be seen to have no existence, and the curious significance attached by Mr. Sidgwick to the words "in den Gedanken," occurring in the second of them, would be rectified. When Kant says of the schema that it exists only in thought, he means, as the subsequent words of the sentence fully show, that the schema is a product of pure imagination and not a fact of empirical apprehension (whether perception or imagination), and when he refers to the "Bild," whether as in imagination or as an actual figure drawn, he is careful to add that the empirical elements contained therein in no way enter into or are essential to the process of reasoning.

ROBERT ADAMSON.

VI.—CRITICAL NOTICES.

The Greek Philosophers. By Alfred William Benn. 2 vols. London: Kegan Paul & Trench, 1883. Pp. xxxii., 404; xii., 430.

Mr. Benn has given us in these two volumes a very interesting and clear account of the Greek Philosophers and the ideas which they represented. His work will never, it is true, take the place, with most students of philosophy, of Zeller's labours; it wants the suggestiveness and richness, the clearness of exposition combined with the accuracy of detail which make it difficult to conceive of Zeller's history as ever superseded. And Mr. Benn would be no doubt himself one of the first to acknowledge the extent to which he has been indebted to Zeller in the construction of his history. At the same time we are distinctly warned against supposing that the work before us is a mere popularisation of Prof. Zeller's history; rather, in fact, Mr. Benn's object is to controvert some of Zeller's favourite doctrines and especially the Hegelianism which misleads him in the study of Greek Philosophy. And certainly transcendentalism of any kind is totally excluded from Mr. Benn's pages; rather indeed one is met by a continued effort to reduce everything to the limits of the natural and commonplace.

This anti-transcendentalism, if I may so call it, strikes me as a somewhat perverting influence in Mr. Benn's treatment of Greek philosophy. We do undoubtedly injustice to Plato and Aristotle when we interpret them exclusively through the language and ideas of Kant and Hegel; but we do them, it must be remembered, no less injustice when we refuse to rise to the level of their high argument and reduce their speculative flights to the level of our own standards of philosophy. The words of Plotinus which Mr. Benn appropriately places in the forefront of his volumes remind us that in studying an ancient author we must try to appreciate his meaning and get the true σύνεσις of his doctrines; and this cannot be done either amid the antiquarian dust of the philologist or amid the associations of the modern empirically-minded critic. Now I cannot but think that Mr. Benn tends to live too much in the present to be able in all cases rightly to understand the past. It was inseparable perhaps from the original form of his work, as consisting largely of articles in the *Westminster Review*, that it should savour somewhat of the pamphleteer and controversialist; but it would have been in all probability a better book had it been subjected to considerable re-writing before its definite publication. It is only another side of this same tendency which leads Mr. Benn to accentuate unfairly (as I think) some aspects of the philo-

sophies he discusses: the result being that his work reads often rather like a number of side-lights upon their doctrines than a sound and systematic account of the doctrines themselves. It is in consequence often difficult to say at what point Mr. Benn will discuss some particular tenet of a philosopher; while the absence of an Index, which such a book ought certainly to have, makes it difficult to find the whereabouts of any passage.

The chief merit of the book is the extent to which it regards Greek Philosophy not as an isolated expression of the Greek mind, but as co-ordinate with the different developments of the Hellenic genius in literature and art. "My object," says the writer, "has been to exhibit the principal ideas of Greek philosophy in the closest possible connexion with the character of their authors, with each other, with their development in modern speculation, with the parallel tendencies of literature and art, with the history of religion, of physical science and of civilisation as a whole." And if this "object" is perhaps too ambitious to be realised in any genuine sense within the limits of 800 pages, it must be allowed on the other hand, that Mr. Benn has brought out the connexion between Greek philosophy and Greek life, between Greek metaphysics and Greek poetry, in a way that one not unfrequently desiderates in accounts of philosophical speculation.

The Pre-Socratic thinkers from Thales to Anaxagoras occupy of course the first section of the book. About them Mr. Benn does not apparently have anything new to tell us: anything new in fact could only be obtained by a closely critical study of their fragments such as would be out of place in a popularly written history. Yet I cannot but think that Mr. Benn occasionally gives a one-sided rendering to the fragmentary sayings of these early thinkers. Parmenides, for instance, we are informed, "tells us plainly that man's thoughts result from the conformation of his body, and are determined by the preponderating element in his composition". Theophrastus, it is true, gives his support to this interpretation of the passage, but it probably means hardly so much as Mr. Benn asserts and in any case it should be noted that the words belong not to the higher but to the lower, *i.e.* the phenomenal, doctrine of Parmenides. And when we read that Plato and Aristotle censured Anaxagoras for "not anticipating the *Bridgewater Treatises* and proving that the world is constructed on a plan of perfect wisdom and goodness," we must be allowed to protest against the prejudice given to the question by the parallel. Nor will anyone who remembers the degree to which Aristotle was evidently indebted to Anaxagoras for the very phrases in which he described the reason readily believe that Anaxagoras was not speaking of "an immaterial unextended consciousness," or understand the logic which holds that Anaxagoras, thinking of his own intelligence as a discriminating identifying faculty, conceived its objective counter-

part under the form of a differentiating and integrating power, and so identified it with a "mere mode of matter".

"The Greek Humanists" is a somewhat fanciful heading for a chapter on the Sophists and their times; but it will probably mislead none who remember what the real work of the period was. And yet the name anticipates the tendency to one-sided exaggeration which I cannot but view as a blot in Mr. Benn's exposition. His contention is that "the Stoic Epicurean and Sceptical Schools may be traced back through Antisthenes and Aristippus to Hippias and Protagoras much more directly than to Socrates". The assertion, like so many others in these volumes, contains such a blending of truth and error that it is difficult to extricate what is true from what is misleading. The Sceptics, no doubt, carried further the destructive work which Protagoras had begun, and the Epicureans supported themselves upon a sensualistic theory of knowledge. But if one is to find the earliest originators of later doctrines, then the true lineal ancestors of the Post-Aristotelian schools is Democritus with his distinction between two kinds of knowledge and his doctrine of *εὐθυμία* and absence of *δεισιδαιμονία*. And whether Mr. Benn be right or wrong, the evil of thus having "contentions" is that the reader is sacrificed to the writer's eagerness to promulgate his views and in the case in question might easily fail to understand that the Sophists were not only moralists but also analysts of language and incipient logicians—paving the way for Aristotle's *Organon*. Yet if the sophists themselves come badly off, the poets are well characterised, and I may be allowed to quote, by way of illustration, a passage in which Æschylus and Sophocles are thus contrasted:—

"Æschylus has an open sense for the external world: his imagination ranges far and wide from land to land: his pages are filled with the fire and light, the music and movement of Nature in a southern country. He leads before us in splendid procession the starry-kirtled night: the bright rulers that bring round winter and summer: the dazzling sunshine: the forked flashes of lightning: the roaring thunder: the white-winged snowflakes: the rain descending on thirsty flowers: the sea now rippling with infinite laughter, now moaning on the shingle, growing hoary with rough blasts, with its eastern waves dashing against the new-risen sun or again lulled to waveless windless noonday sleep: the volcano with its volleys of fire-breathing spray and fierce jaws of devouring lava: . . . the meadow dews: the flowers of spring and fruits of summer: the ever-green olive and trees that give leafy shelter from dogstar heat. For all this world of wonder and beauty Sophocles offers only a few meagre allusions to the phenomena presented by sunshine and storm. No poet has ever so entirely concentrated his attention on human deeds and human passions."

The iconoclastic character of Mr. Benn's pages becomes more obvious as we proceed. Readers of Grote's books hear much in connexion with the life and views of Socrates about his consciousness of a religious mission and his refutation of human ignorance. Neither the one thing nor the other, Mr. Benn

assures us, has any place in Xenophon's conception of his master. And Zeller, it appears, is still more wrong in making Socrates seek what true science ought to be. And there is no doubt that modern exponents of Socrates have tended over and over again to go far beyond the simple unsophisticated picture which Xenophon gives us of a thinker who gravely argued that Anaxagoras was mistaken in supposing that the sun was fire because the sun makes people black whereas the fire produces no such effect. But it is one thing to allow this, another thing to maintain that Socrates first brought out "the idea not of knowledge but of mind in its full significance". No doubt, as Xenophon tells us, it was *ἀνθρώπινα*—human matters—that chiefly excited the interest of Socrates: but in dealing with these his great object was to find out what each was, and the passage, to which Mr. Benn himself twice calls attention, in which Aristotle regards *καθόλου ὁρίζεσθαι* and *ἐπακτικοὶ λόγοι* as constituting Socrates's contribution to the history of philosophy would seem to make it evident that Socrates was quite as much occupied in finding out what true science (*i.e.*, knowledge) ought to be as in bringing out the idea of mind.

Socrates is in most histories of philosophy succeeded by a chapter on the semi-Socratic schools of Antisthenes, Aristippus and Euclid. There is no such chapter in Mr. Benn's work: nothing but some incidental references to their tenets. And the absence of such a chapter shews its effects in the chapter on Plato—one, I am inclined to think, of the least satisfactory in the work. The reason is, no doubt, partly to be found in the fact that we are never led to see how Plato's Philosophy was an answer—and a very earnest one—to the logical and ethical individualism of his age—an individualism which showed itself now in the nominalism of the Cynics, now in the hedonism of the Cyrenaics. The ideal theory itself is reserved for a few lines at the close of the chapter; and Mr. Benn congratulates himself on the fact that he has been able to expound Plato without bringing in his Ideal Theory, as showing that the doctrine of Ideas is a "much less important part of his philosophy than is commonly imagined". It may be unimportant to a modern critic: but a thorough student of Platonism can hardly fail to recognise the fact that it constitutes the most important part of his philosophy to Plato. It lies at the very root of his theory of knowledge: it was just in fact, as Aristotle shows, the necessity of explaining the *fact* of knowledge which led Plato to postulate the existence of ultra-sensible realities: it determines his repugnance to art: it underlies his theory of virtue, and the idea of good is Plato's "greatest lesson" (*μέγιστον μάθημα*) for the world. And a writer who proposes to explain the work which Plato did for his times without taking account of his Ideas must not be surprised if he find that he is thought by most students of the Platonic *Dialogues* to have left out the very soul of the Platonic creed. It may be

that "Plato was pre-eminently a practical, Aristotle pre-eminently a speculative genius," but the real value of Plato's philosophy lies in the degree to which he shows that a metaphysical basis is required for practical enterprise.

The account which Mr. Benn gives of Aristotle throws no inconsiderable light upon some parts of the Aristotelian system. It is, for instance, refreshing to find him saying that Aristotle's categories are "not a classification of things, but of the information which it is possible to receive about a single thing": had Stuart Mill taken such a view of their meaning he would not have found it necessary to challenge their exhaustiveness by asking under which category we should class sensations. Apart, however, from side-lights of this kind, it is difficult to get much real information about Aristotle from the pages which Mr. Benn devotes to his philosophy. The *Ethics* is disposed of in some three pages: in fact a careless reader, remembering that "Aristotle is not a practical genius" might be excused for supposing that Aristotle had never written on morality at all. The most careless reader, however, would very soon come to know that Aristotle gives us for explanation a mere description of the facts to be explained, and that he "made the indication of his own ignorance and confusion do duty for depth and distance". "To say that a thing is developed out of its possibility merely means that it is developed out of something the nature of which we do not know." Such a sneer would be justifiable enough if the Aristotelian antithesis in question had remained nothing but an abstract formula. But anyone who remembers the application of the theory to Ethics, Politics, and Psychology will hesitate to speak of Aristotle as simply "constructing the world not of our ideas but out of our absolute want of ideas". Even the logical analysis of Aristotle is not free from Mr. Benn's criticism. Syllogism, it appears, is "not a process of discovery but of proof," and more particularly it is based on the relations of concepts instead of on the relations of judgments. It is difficult to understand altogether the significance of this objection. But, when we remember that scientific knowledge to Aristotle just consists in finding out the middle term which shall be also the causal explanation of phenomena, when we remember what he says about *ἀγχίνοια* or scientific readiness, it is difficult to think of Aristotle's syllogism as merely a scheme for proving something already ascertained.

The Logic of the Stoics gives Mr. Benn another opportunity for noticing the weakness of the Aristotelian analysis. The Stoic method marks, he holds, a real advance on Aristotle's. And the main ground for this assertion is, it seems, that the first principles of reasoning are with the Stoics "not to be postulated as unconditionally certain: they are to be assumed as hypothetically true and gradually tested by the consequences deducible from them". It was inseparable, of course, from the development

of thought that the Stoics should in some parts of scientific analysis go further than the earliest analyst of scientific method. But it is unfair to Aristotle to forget the way in which he insists on the need of experience for testing theories (*e.g.*, *Eth. Nic.*, x. 8, 8) and to say in addition that the "hypothetical syllogism was first recognised as such by the Stoics" is misleading when nothing definite is said about Aristotle's *συλλογισμὸς ἐξ ὑποθέσεως*. However, I am not disposed to quarrel much with Mr. Benn about his treatment of the Stoics, which is for the rest a sympathetic and clear statement of their leading propositions. Nor do I think it necessary to enter upon the chapters on the Epicureans and Sceptics; and of the chapter entitled the "Religious Revival" it must be enough to say that it gives an interesting sketch of those developments of religious belief and superstitious observances which Friedländer had so successfully delineated in his *Sittengeschichte*.

Greater attention, however, is due to the chapter on the "Spiritualism of Plotinus," one, I am inclined to think, of the best which the book contains. And the reason, perhaps, of Mr. Benn's success in this direction is that the controversial view is kept more in the background, and that he is more occupied in giving an historical account of an ancient author than in criticising the accounts which others may have given. It is, as he points out, by his refutation of materialism that Plotinus stands out in Greek philosophy: and this refutation, he thinks, Plotinus argues "more powerfully than it had ever been argued before, and with nearly as much effect as it has ever been argued since". Of these antimaterialistic arguments of Plotinus Mr. Benn has given an extremely clear and readable account: I am unacquainted with any English book which gives so good an expression of their import. And I should simply suggest that if Mr. Benn has occasion (as I hope he may have) to re-edit his work, he will add a reference to the striking passage (*Enn.* iv., Kirchhoff i., p. 20) in which Plotinus shows how a transmission of impressions (*διάδοσις*) is quite unable to explain the unity of conscious perception.

"The Relation of Greek Philosophy to Modern Thought" is the subject of Mr. Benn's last chapter, and as it is the portion of his work which originally appeared in this Journal, it is perhaps the part of his labours on which I may be excused from saying much. It is, to begin with, a great thing to find a modern critic recognising, as Mr. Benn does, the close interdependence between ancient and modern thought. And it is also a good thing for many Englishmen to be reminded of the worthlessness of Bacon's contributions to either ancient or modern philosophy, and to learn that "Bacon exemplified in his own intellectual character every one of the fundamental fallacies which he has so picturesquely described". And all Hellenists, at all events, will welcome the admirable words in which Mr. Benn has expressed his estimate

of the earlier Greek philosophers—words which may serve as the conclusion of this paper:

"On every subject of speculation that can be started, we continue to ask, like Plotinus himself, what the 'blessed ancients' had to say about it: not, of course, because they lived long ago, but because they came first, because they said what they had to say with the unique charm of original discovery, because they were in more direct contact than we are, not, indeed, with the facts, but with the phenomena of nature and life and thought."

EDWIN WALLACE.

Hegel. By EDWARD CAIRD, LL.D., Professor of Moral Philosophy, University of Glasgow. ("Philosophical Classics for English Readers.") Edinburgh and London: Blackwood, 1883. Pp. viii., 224.

The difficult task undertaken by Professor Caird has been discharged with a remarkable measure of success. It is no easy matter to write upon Hegel at length so as to bring his position within reach of even the philosophic student in this country; and one might well despair of an attempt to give within the narrow limits of the Philosophical Series a view which should be moderately intelligible to the general cultivated reader. Yet in this attempt we think Professor Caird has been fortunate. His little volume not only presents the preliminaries of the Hegelian system in such a fashion as to overcome the initial difficulty for the English student—that of understanding the drift of the whole—but it is throughout animated by so wide and genial a philosophic spirit, and expresses so evidently a full and thoughtful mind, that it is in itself an excellent contribution to general speculative thinking. Much good will undoubtedly be achieved by it for Hegelianism in this country, but, what is of infinitely greater importance, the reader can hardly fail to carry away something of permanent benefit from the weighty and maturely pondered reflections which give the volume its special value. The author himself would be one of the first to maintain that the Hegelian system, pure and simple, cannot be transplanted into foreign conditions; nor, indeed, has the world of thought stood still since Hegel's days. The rapid development of thought and culture renders it for ever impossible for this age to remain satisfied with the method of organising its spiritual interests that rested upon an earlier platform of ideas. But the great principles which underlie the Hegelian philosophy and which it was the task of Hegel's life to reduce to their abstract essence and to unfold into their concrete applications, these are of perennial value, and no generation can afford to do without a *metaphysic*, without a *rationale* of what secretly animates its own life and gives to its varied productions in all spheres of activity their peculiar colouring. For the construction of such a metaphysic, no more thorough preparation

is to be had than the Hegelian system. Truly, as Mr. Caird puts it, the *Logic* of Hegel is the one work which modern times have to place alongside of Aristotle's *Metaphysic*, the one laborious and manful attempt to decipher in its entirety the chain of thoughts that binds our spiritual life into a unity. Probably the comparative neglect which seems to have overtaken Hegel's work is a symptom that is not altogether without an encouraging significance. The abstract treatment of thoughts which can only by hard effort be disentangled from their concrete exemplifications is valueless unless the disentanglement has been to some extent effected. The full importance, therefore, of the Hegelian contribution to the comprehension of modern thoughts, can only disclose itself after such criticism of principles as lays bare their real essence. The several notions that come forward in the *Logic* represent *in abstracto* distinctions, oppositions or differences that give life to actual thinking. The import of the treatment they receive can be appreciated only through reflection on the problems which arise in connexion with such distinctions. Perhaps, too, our age is over-cautious. We have a secret or avowed distrust of systematic philosophising, and spend our efforts rather on preliminary criticism than on constructive work. Each distinction that presents itself in our spiritual life comes forward with so much clustering round it that the task of clearing the way seems sufficiently great to preclude the hope of systematically viewing all such distinctions in their organic nexus. We have to digest in order to assimilate, and doubtless our age has much to do before it has digested even what underlies the Hegelian work.

Professor Caird's volume falls naturally into two parts: the one tracing the life of Hegel, both as regards external fortune and in its inner development; the other, devoted to an account, such as the space allows, of the main features of the Hegelian philosophy. I do not propose to offer remarks on any matters of detail regarding the several chapters devoted to these two purposes. The student as well as the general reader will find much to interest him in both divisions, and probably, at various points, would have desired more than the author has been able to extend to him. One might have wished a fuller statement respecting some of those *junctures* in the system which cause greatest stumbling to the modern reader, *e.g.*, respecting the precise significance of the *Naturphilosophie* and on the conception of spirit in its relation to *Natur* specifically and to the individual subject. But such matters belong doubtless more appropriately to an extended exposition, and it would be ungrateful to grumble at not receiving more when so much that is good has been afforded. What is given, specially on pp. 195-202, is amply sufficient to obviate the grosser misconceptions that have arisen in respect to Hegel's treatment of natural science, and that have been fostered by the unsparing but one-sided criticism of scientific experts.

The view of the life of Hegel, presented in some detail in the

first five chapters of Prof. Caird's little volume, appears to me a most happy illustration of the genuine method of handling the history of philosophy. As a rule, histories of philosophy convey to the student an extremely false conception of the nature of speculative thinking and of the mode in which advance or development of philosophical doctrine takes place. Each philosophy is regarded as though it were the treatment of some isolated problems or the attempt to convey an explanation of some special order of facts. The analogy of the natural sciences, where abstraction from all interests other than those specially involved is not only admissible but necessary, where each branch of knowledge seems to have its peculiar sphere of phenomena within which it moves, tends almost insensibly to induce a similar view respecting the functions and problem of philosophy. And in the sequence of philosophic systems each is put in a definite relation to its predecessor as though it were simply an improved method of dealing with the same special facts, improved by reason of the light afforded in the preceding attempts. There is thought to be a direct filiation of philosophical systems, as though each carried out with the aid of the preceding the investigation peculiar to philosophy as such. Now this conception is perhaps not so much false in itself as incomplete and therefore misleading. Philosophy in the amplest sense of that word has no special order of facts to consider, no province which is one among many others. It is not to be placed alongside of other branches of investigation as though classified on the same principle by which they have been divided. In essence, a philosophy is the abstract expression, the statement in ultimate terms, of the thoughts, opinions, modes of looking at things which make up what is so frequently described as the spirit of an age. Each stage of culture has its peculiar colouring, for at each stage there are present and operative in thought and action principles of a character more or less general, more or less defined. It is the business of philosophy at any period to *think* through these principles, to carry them back to their ultimate source, and by subjecting them to the criticism which can only be offered when they are treated *in abstracto*, to determine their value and place in the spiritual life. A philosophy is great, just in proportion as it takes up into itself comprehensively the body of ideas that informs the intellectual atmosphere of the time, and as it succeeds in viewing them in their connexion with the ultimate fact in nature, the life of self-conscious intelligence. Philosophies will differ from one another, will be historically distinct, by reason of the continuous alteration which takes place in this intellectual medium, an alteration in part due to philosophy itself, and through the varieties in the method by which the testing or comprehension of the whole body of ideas may be attempted. Thus the history of philosophy is a record of the final conceptions which at suc-

cessive periods are formed by reflection on the facts of existence as viewed at each age, and must be unintelligible or, at least, but partially understood, if not taken in the closest connexion with the spirit of each age. If I may illustrate by a reference to a single set of considerations, I would point out that the speculative thinking of the seventeenth century—the Cartesian systems being the typical representatives—is but poorly appreciated if we do not take at its full value the prevailingly geometrical conception of things which was the dominant scientific idea of the time. The speculative thinking of the eighteenth century in like manner—our English philosophy being its typical representative—expresses in an ultimate fashion the mechanical conception then prevailing. And the influence of ideas not generally considered philosophical is by no means limited to those employed in natural science. Every part of human life is viewed at different times in different lights, and the ruling ideas or principles of judgment are all important factors for philosophical reflection. Thus at the beginning of the nineteenth century, the most significant conceptions were those which affected more particularly the ethical or social life of humanity. As in ethics generally, these conceptions were complex and secondary, implying, though in the use of them the implications might remain most obscure, ultimate views regarding the function and quality of human life. The principle of individual liberty, especially, was one of application most wide and of implication most obscure, but a philosophy contemporaneous with the practical acceptance of such a principle in human life was of necessity bound to reflect deeply upon the meaning of individuality, and thus to attempt a truly philosophical criticism of the principle itself. Such criticism may seem to have led far from the facts from which it started; in the Kantian system, *e.g.*, it led to a profound inquiry into the nature of intelligence and its relations to the sum total of things. But it is the very secret of philosophy that it is a circle. Enter it where we may, from this notion or from that, we are led on in an inevitable round, ever striving to complete our view and to see the notion with which we started in its true relations to all that makes up our intellectual cosmos.

As it is with the history of philosophy, so it is on a less scale with the life of a great philosopher. Could we trace that in its entirety we should be able to see how the dominant ideas of the time entered into his spiritual life, affected it and were in turn affected by it, how out of the chaos there was gradually formed the ultimate view in which the disjunct members are harmoniously placed, in which the apparent oppositions are reconciled by being placed in their true relations to one another and to the whole. Perhaps no life presents greater interest when regarded in this fashion than that of Hegel. For the period during which his view of things was being formed by conscious or unconscious process of assimilation was one unusually rich in those ultimate

thoughts that express deep-seated tendencies of thought and action. Operative on him were the principles of the two greatest events in modern history, the French revolution and the critical philosophies. On him, too, were brought practically to bear the potent influences of the fresh study of Greek life and art and of the critical investigations in the domain of Christian religion, that were characteristic features of German culture in the early part of the nineteenth century. These great conceptions, ramifying in the most varied directions, giving rise to more or less spasmodic efforts of thought and expression in German life, and manifesting, where each was pushed to extremes, oppositions of an unusually violent character, had to be taken up and worked into one harmonious, concatenated system. The vast importance of the Hegelian doctrine can be duly appreciated only when we take into account how comprehensive and significant were the principles there reduced into one multiform idea, and how enormous was the effort of thought required to reduce them to their clear essence and to exhibit them in their place and function as elements in the life of a self-conscious intelligence. For the reader, the difficulty of the Hegelian work is not its abstractness, nor even any peculiarity of its method; but, on the contrary, it is the very concreteness of each notion, the manner in which each is regarded in the light of the whole, the mode of placing the several parts so that the twofold nature of each, in itself and for the others, shall never be forgotten, that make of the dialectic an " almost unsupportable burden ".

Prof. Caird's treatment of Hegel's life, as was said, is singularly able and interesting. He has given a real contribution to the writing of the history of philosophy, and undoubtedly the sketch of the development of Hegel's mind will do much to clear up the real significance of the Hegelian system.

The concluding chapters of the work present in brief and pregnant fashion an outline of the problem of philosophy in Hegel, an explanation of what is so often a stumbling-block to the beginner—Hegel's teaching in regard to the Principle of Contradiction, a general description of the *Logic* and a statement of the way in which the Hegelian doctrine is related to the important spiritual interest of Christianity. More could not, perhaps, have been achieved in the limited space at command, and Prof. Caird has done well to abjure details and content himself with indicating the central thought from relation to which only could the details become intelligible. One regrets that room could not have been found for some indication of the way in which the Hegelian idea permits us to view the facts of practical life, of individual morality and ethical custom, for here in particular one must recognise the value of the Hegelian work as opposed on the one hand to the abstract, psychological ethics of the best known writers in English, and on the other hand to the ' naturalistic ' ethics which has recently come forward as furnish-

ing an answer to problems left unsolved by the earlier methods. But on points such as these, it is not possible to enter here. A word, however, may be permitted on the *Logic*.

At the present time logical studies are in a very remarkable condition. Nothing can surpass the chaos of views with respect to their exact character, limits, value, and relation to philosophy generally. There is undoubtedly in this condition of things an element of reaction. Just as in Political Economy recent writers are almost instinctively driven to take an attitude of opposition to the older doctrines which presented themselves as forming a complete, harmonious system, so in Logic, the neatly worked-out Formal Logic of the school of Kant and the more complex Logic of Empiricism have shown themselves inadequate to solve the questions inevitably suggested even within their own lines. Writers on Logic, then, are at present endeavouring to obtain some new point of view from which it may be possible to survey the whole ground. Towards such an end nothing could be more helpful than appreciation of the Hegelian Logic. As a rule, our logical treatises are prevailingly psychological, even though at the very outset an opposition between logic and psychology may be indicated. Notions, judgments, and inferences are regarded as so many facts, to be grouped under the common head of Thought and having special characteristics. For example, the notion is viewed as one peculiar product of mind, distinct in certain respects from the percept, and divisible into kinds, *abstract* and tne like; and one section of logical doctrine is devoted to the treatment of these features. So to regard the notion is quite in accordance with psychological method, which rests upon and implies the assumptions that fall to be examined in a theory of knowledge, but it leaves us with all the deeper questions untouched and with a wholly unworkable idea of what constitutes knowledge. The student who approaches the Hegelian Logic after a training of the ordinary kind is apt to be absolutely bewildered by finding the old names used for facts which seem to have nothing in common with the 'products of thought' to which he has been accustomed. If he attempts to read into the Hegelian section on the notion his view of notions as special subjective phenomena, he will undoubtedly find himself in outer darkness. The Logic of Hegel is no psychology of thought, but the systematic treatment of those ultimate elements in our view of things which constitute their intelligibility for us. However interesting may be the history of the steps by which in the subjective experience of the individual this view is realised, such a history is not Logic but Psychology. The 'forms of thought,' the categories of intelligence, as Prof. Caird well puts it, "are not a collection of isolated ideas, which we find in our minds and of which we apply now one, now another, as we might try one after another of a bunch of keys upon a number of isolated locks; . . . the cate-

gories are not instruments which the mind *uses*, but elements in a whole, or the stages in a complex process, which in its unity the mind *is*". To make clear to ourselves the implications of the current logical doctrines is to take a long step on the way towards a truer and more profound analysis of thought; and nothing can contribute so powerfully towards this end as an accurate apprehension of what the problem was which Hegel set himself to prove in the *Logic*.

R. Adamson.

The Origin of Ideas. By Antonio Rosmini Serbati. Translated from the Fifth Italian Edition of the *Nuovo Saggio sull' Origine delle Idee*. Vol. I. London: Kegan Paul & Trench, 1883. Pp. lii., 382.

The *Nuovo Saggio*, the work in which Rosmini first fairly broke ground in 1830, and which he subjected to continuous revision up to the end of his career, forms, perhaps, the best introduction to his voluminous and encyclopædic system of philosophy, of which a *conspectus* was presented to English students last year in Mr. Davidson's translation of the philosopher's short account of his own views, reviewed in Mind XXVII. This second contribution to our knowledge and understanding of Rosmini comes in excellent form, admirably rendered by friendly and competent translators, and preceded by a sympathetic introduction of 50 pages, containing extracts from his other works which throw light on this. The present instalment of the *Essay* consists of a historical introduction to his own Theory of Knowledge in the form of a critical review of previous theories, some of them, like Locke's, erring by defect as assigning an inadequate cause, and others, like Plato's and Kant's, erring by excess of explanation; but, in these animadversions, he of necessity reveals his own principles and position, and does so with some definition and detail, so as to provide material for a first statement and appreciation of his theory, awaiting reconsideration on the issue of the completing volumes. His first finding, upon reflective introspection and analysis, may be stated thus;—that, not merely to feel but to *perceive* our feeling or sensation, to get "an idea or cognition" of it, to cast it off from us and set it over against our perceiving as a perceived "*object*," we must affirm that it "is," by a kind of "judgment" that predicates of it "Being"; and that this "Being," like the predicate of every judgment, is a "universal," or general term, but, inasmuch as no process of abstraction and generalisation can have as yet obtained, this must be an innate one; and, *à fortiori*, that all other more complex percepts, concepts, or ideas, require such judgment, and predication of this universal for their formation. Here is the *pons asinorum* of ideology and philosophy according to Rosmini, and a very difficult and narrow, if not impossible, passage it will prove for the followers of Locke,

Hume, and Mill, who have been accustomed to find in sensation and reflection upon sensation a sufficient account of experience, and, as Rosmini says of Locke, may not be able to bring themselves even within sight of this crucial passage to the problem of knowledge. "The mind must be accustomed to gaze on the ideas themselves, stripped of all the trappings of words, schemata, and methods," that would behold the innate "idea of being in general," and have and hold it, not merely, as everybody can do, as the last and emptiest of abstractions by the handle of a word, but as that veritable *à priori* "*intuition* of indeterminate or possible being," on which Rosmini founds his whole system, and affirms to be the very "Light of Reason," and that which even creates the intellect. But the English school are devoid of this Platonic second sight, and do not miss it, thinking that knowledge is not built up of judgments or affirmations of this formal and propositional sort, that requires us to have a concept before we can begin to conceive, and a percept or intuition before we can begin to perceive; that on the contrary, sensations given, the process of reflection they know of, can discriminate and grasp them and hold them in bundles at arm's length as objects—the distinction in reflection between the many felt and perceived or conceived objects and the one subject of feeling and knowledge being nothing for us but the distinction between the many particular feelings and feeling in general, that which is the one common feature of them all. So Rosmini judges that these thinkers have not even seen the *pons*, much less crossed it.

A heavy but lesser condemnation awaits those, like Kant Leibniz and Plato, who, having crossed, have gone too far with innate ideas, not seeing that the first they met with, the concept of Being in general, keeper of the threshold of the house of knowledge, was enough, and itself the source of all other ideas or categories. Here, Rosmini attempts to reduce all the other Kantian categories to the modal one of "possibility," which he identifies with his own Pure Being or idea of Being in general, the only fundamental and strict form from which the others are inferred, or differenced by admixture of the various matters of sense. But, it is doubtful whether a Kantian *pur sang* would admit that his master's categories were fully fledged and complete concepts like Rosmini's aboriginal and perfect "Ideal Being," and, for the rest, it remains to be seen in the sequel, whether "quantity," "quality," "substance," "causality," and so on, can be got out of the concept of mere blank Being. Perhaps the author comes nearer the truth about Kant, when he seems to say that Kant's Categories are simply the several functions of unifying thought, and merely an elaboration and rigorous specification of Reid's "Common Sense," and that, again, only a vigorous and hearty affirmation of Hume's more modest "Instinct"; and, in this regard, Rosmini's "Ideal Being," taken as "Possibility," would be only a statical image or symbol of the constant forward

strain of reflecting mind, and, taken as "Pure Objectivity" or the idea of objectivity in general, it would only be a figurate cross-section of the perpetual process or act of objectification which comprises and reveals the essence of "the original synthetical unity of apperception"—"ὁ νοῦς," as Aristotle says, "τῇ οὐσίᾳ ὢν ἐνεργείᾳ". But Rosmini does not allow this construction. His form is not a mere "subjective" form, as he calls Kant's categories. It is *in* us from the first psychologically, but not *of* us either so, or transcendentally—not our immanent act, but an alien thing coming from abroad. It is not merely the idea of objects in general, but the idea of things-in-themselves in general, and apparently its business is to make known to us that what we feel is, just as it acts on or in us and we feel it, a thing "existing in itself, independently of us, of our passion, and of all other beings whatsoever". "Being has two modes, the one *subjective*, and the other objective." "The subjective existence is supplied to our cognition by the senses." Objective Being is the idea of being in general or of possibility. It is the intelligibility of the thing felt, and in no way alters it. "It simply illumines it." Since in both modes "we have the self-same being, it follows that the cognition is valid and true". At first sight, this looks like no more than an extremely ontological way of stating the spontaneous convictions of the ordinary unreflecting man. But the proof of this bold assertion of absolute certainty and science has to follow, and until it is published, it would be premature and unfair to essay an arbitration between Rosmini and eitner Phenomenalism or Absolute Idealism.

J. Burns-Gibson.

Commentar zu Kants Kritik der reinen Vernunft. Zum hundertjährigen Jubiläum derselben, herausgegeben von Dr. H. Vaihinger. Erster Band (Zwei Theile). Stuttgart: Spemann, 1881-2. Pp. xvi., 506.

Among the many works about Kant, which owed the occasion of their publication to the centennial commemoration of the first edition of the *Kritik der reinen Vernunft*, Dr. Vaihinger's *Commentary* on that work is entitled to a foremost place. When completed, this commentary is meant to fill four goodly octavo volumes. Of these only the first has yet appeared:—and in two parts, separated from each other by the interval of nearly a year. This volume, which for printing and paper deserves every commendation, deals only with the 'Preface' to the first edition, and with the 'Introduction' both in its earlier and later forms. Even within these limits several questions of history and exegesis have been reserved for discussion in special supplements. Excursus, dealing with the disputes on the *a priori* or empirical character

of mathematical truths and of the causal law, both previous and subsequent to the time of Kant; with the anticipations of the distinction between analytic and synthetical judgments to be found in earlier writers; with the specific relations in which Kant stands to the influence of Hume; and even with the meaning of terms, like "Rein," or "Transcendental";—these, which form battle-fields of Kantian philologists, and cannot be dismissed in a sentence, are all postponed to a future volume.

Unquestionably the work which Dr. Vaihinger is undertaking is complex and laborious. The due proportion between the parts and their subordination to the whole cannot be preserved without an almost prophetic forethought. It becomes the more incumbent upon the commentator to cut away every luxuriant detail, to have no mercy on irrelevant references, however interesting, and above all to reduce to a minimum the space allowed for discussion of the arguments or phraseology of individual expositors, in all cases where the interest of such controversy is personal rather than material. When one thinks of the burning questions which arise at almost every step in the 'Transcendental Deduction' of the forms of thought, of the problems which especially beset the treatment of the 'Analogies of Experience,' and of the deeps calling unto deeps in the metaphysical discussions of the 'Dialectic,' the space of four volumes seems but a scanty measure to hold the overflowing stream of exegesis.

Of the utility of Dr. Vaihinger's enterprise few students of Kant will be inclined to doubt, were it only as a storehouse of materials, an arsenal of weapons for the Kantian controversy. The explanatory evolution of the Kantian doctrine has been carried on at so many points, by so many hands, and in so many directions, that the time seems to have come for 'taking stock' of what has actually been brought together during the last 100 years by the labours alike of friend and foe. These expositions fall into two periods: an earlier, coeval with the close of last century, and a later, separated from the former by the domination of the great idealist schools from Fichte to Hegel and Schelling. Though it is among the merits of the present commentator to recal the points raised by the earlier critics, he naturally deals most effectively with the modern awakening of Kantian studies during the last twenty years. This movement, sometimes loosely described as Neo-Kantism, has several phases. In its more distinctively Neo-Kantian aspect, it is an attempt to find in Kant a resting-place for the storm-tossed pilgrims of philosophy, alike for those who would establish some *modus vivendi* between speculation and the special sciences, and for those who believe that Kant's metaphysical ethics can save them from the spectre of materialism. But besides these disciples who are bent on developing into more systematic completeness what they take to be a sound foundation, there are other students

who approach Kant in a more purely critical and historical spirit. In this historical movement the post of coryphaeus may be given to Kuno Fischer, whose account of Kant in the 3rd and 4th volumes of his *History of Modern Philosophy* paved the way for the historical study of Kant's intellectual development. Less bulky but most suggestive contributions were made in the same general direction by Bona Meyer, Noack, Liebmann, and a host of others. Gradually Kant entered upon the rank of a classic; and the study of Kantism assumed the shape of a branch of philology. The philosophical interest became for the time second to the archæological. Long-concealed manuscripts from he Kantian archives were brought to light, and made to supplement the gaps in our record. Greater effort was made to secure the textual accuracy of the published works, which had hitherto been treated in but step-motherly fashion by the editors. Ambitious critics even hoped to emulate the glory of Aristotelian scholarship, by discovering evidence of double redaction and awkward junctures in the *textus receptus*. And the result was to discredit the 'Kant-philologists' as a too curiously-inquisitive class of men, who brought into the precincts of philosophy methods which should be confined to the walks of erudite scholarship in Greek and Latin. Kuno Fischer in his new edition addresses words of rebuke to the philologists who, as he thinks, have unduly magnified their office.

Yet, whatever may be said of single points, it would be a mistake to depreciate the value of an accurate and minute criticism and exegesis of the relevant documents of a philosophy. In the case of Kant, especially, the spectacle of contradictory theories based, as was alleged, on the same utterance, seems emphatically to call for a close and critical comparison of the *ipsissima verba* of the writer, such as *e.g.*, Bonitz has exemplified in dealing with Plato and Aristotle. For if the history of philosophy is to be studied, and the words of a philosopher made the text of exposition and generalising criticism, the foundation must be laid in verbal analysis. The student, it may be admitted, who reads Kant to seek help and suggestion for his own mental development, will not perhaps find any charm or merit in searching comparisons, wire-drawn distinctions, and elaborate discussions which try to run to earth the rambling and twisting thoughts. This erudite quibbling will seem to him the vain play of ingenious philology: external criticism, which throws away the spirit to clutch at the letter. Yet even he may be glad to borrow a light from this *Commentary* to elucidate a puzzle; and still more will the expositor who professes to deliver to the present age his adaptation of Kantian philosophy, and claims for it the authority of his master, be perforce drawn to consult, even if he do not adopt, the clue offered by Dr. Vaihinger. For, as that scholar remarks, "the Critical Philosophy is a series of expositions, which as they come after each other by way of

complement and continuation, tend to go back again upon what was said before, and, of course, often to contradict it: expositions, contained partly in the several parts and editions of the *K.d.r. V.* itself, partly in the other Critical writings. Out of the flux and variety in these contradictory and self-correcting statements, to extract and put together the average normal picture of the Critical Philosophy is for that reason a possible and a necessary problem for the historian of philosophy who seeks to render a true representation of this mighty mass of thoughts. But possible it can be, only by means of the microscopical, though not micrological, labour of the philologist."

The "Commentary" proper is preceded by a disquisition on the historical position of Kant between two periods of different speculative aim and method, and by a fuller examination of the *media via* which the Critical Philosophy claims to follow as the only salvation from the dangers of dogmatism and scepticism. Dr. Vaihinger attempts to hold the balance true (and he returns in his "Methodological Analysis" pp. 388-450, to the same theme), between the two *momenta* of rationalism with its *a priori* elements, and empiricism with its sense-experience: to keep perpetually in view the Janus-face of Kantism, which commentators, who lay exclusive stress on one or other aspect, are constrained to miss. He shows with much acumen the many signal features of the *Kritik* which depend upon this fundamental characteristic. Sometimes indeed his distinctions seem to lose themselves in a hard and dry formula: a mere shell of learning is left instead of the living power of the philosophic word. But such a consequence is perhaps inevitable in any attempt to classify a unique historical phenomenon: and Dr. Vaihinger has amply compensated for any want of intimacy in his apprehension of his author, by the brilliant pages of analytic criticism in which he discusses the several aspects of Kant's problem. As against Paulsen and Riehl, who hold that in the first edition of the *Kritik* the inquiry assumes the psychological fact of synthetic judgments and asks whether and on what conditions they are valid, while in the second edition and the *Prolegomena* the validity of the judgments is assumed and only their origin remains to be examined, and partly as against Fischer who holds that Kant in all cases started from the validity of the judgments, Dr. Vaihinger adopts a view which he thus sums up (p. 411):—

"Fischer is right, in so far as he puts in the foreground the problem of *explaining* the validity of mathematics, &c. But as it is incorrect to exhibit this fact of validity as absolutely beyond the reach of doubt,—which the attacks of the Sceptics show that it is not,—it follows that it is unjustifiable to exclude from the problem the proof of this validity. And so, while from the former point of view the synthetic *a priori* judgments in mathematics are in Kant's eyes valid members in the system of science, they are from the latter point of view no better than psychological facts. Thus Fischer's opponents are entitled to claim this complement to his exposition: but they are wrong when they treat this problem of the proof

of validity as the main topic, and when they assume that by presupposing the validity the critical theory has ended before it had begun. On the contrary the original problem consists in the *explanation* of this validity: it still remains such, though this validity may no longer be a universally accepted presupposition, but may require to be demonstrated: the explanation carries the proof with it. When the first view is thus corroborated, and yet the second not excluded, but shown to be complementary,—when the *result* is thus really a *resultant*, it appears that both parties are in the wrong, because with both questions they mix up, to an extreme height of confusion, and even unduly under-estimate, a third problem,—the disclosure of a new method for the discovery of true knowledge."

But it may be added that Dr. Vaihinger in arriving at this result was not exactly formulating a novelty: he was only bringing out with a clearness previously unexampled the conclusions which others had seen to be involved, and carrying to their rigorous issue criticisms which other and more purely expository writers may not have deemed it necessary to pursue to the bitter end. He admits himself (p. 423) that the "fluctuation" in Prof. Watson's statements at which Mr. Balfour "wonders" is after all the inevitable consequence of the "antithetical" and "hypothetical" problem (for the meaning of these logical terms see pp. 393, 399) which Kant had before him, and that another English "transcendentalist" had seen that the explanation of the fact involved its justification. As to his fancy that Fischer's account of Kant has founded the English study of the subject, it is a mere fancy.

And yet Dr. Vaihinger is right in working out his thesis of the inherent inconsistencies of the Kantian work to extremer issues than the English Kantians have carried their exposition. He shows that, however valuable the materials, the suggestion, the methods, contained in the *Kritik* may be, the Critical Philosophy as it stands cannot be the foundation of modern philosophy. If Hegel cannot remain a safe basis, no more can Kant. As Ferrier said: "No man for at least two thousand years has seen the true flesh-and-blood countenance of a single philosophical problem. Every question in philosophy is but the mask of another question, and all these masking and masked questions required to be removed and laid aside, until the ultimate but *truly first* question has been reached." We must go deeper than the historical Kant if we wish to build on the rock: we must set aside the individual limitation, the personal *Vorurtheil*, with which even he begins his work. Kant has as yet been read too exclusively as a foil to set off Hegel, or Schopenhauer, or English psychologists. We want a larger and freer study of Kantism in its intrinsic merits: not merely in the points which the sympathy or antipathy of another type of thinker fastens upon as characteristic; but on every hand, as a system of free thought, essaying to construct by reason the foundations of a faith. And as a contribution to that end, this *Commentary*, even though it sometimes recals a remark which a former pupil brings me as

from the author ('I first read everything about Kant, and then sit down to confute it'), deserves a warm welcome. Particularly, perhaps, as Dr. Vaihinger does not by any means pass over unnoticed, after the manner of his countryman Kuno Fischer, the labours of the English Kantians.

The complication and the frequent immanent want of clearness of the *Kritik* are, as Dr. Vaihinger remarks, partly to be explained from the gradual growth of Kant's own ideas, and require for that end a psychological history of his development. Dr. Vaihinger endeavours, though with some straining of facts, to show that twice in his lifetime, about 1762 and in 1772, Kant passed from under the influence of Leibniz and Wolff, through the torpedo-like shock of Hume, into what may be called a 'Critical' standpoint. But it is very hard in such a matter to keep within due limits: analogies mislead; the traces Kant has himself left are slight and open to interpretation. Dr. Vaihinger errs, and Prof. Benno Erdmann is perhaps a greater offender, in giving too free play to the very natural desire to construct an intellectual biography of Kant, to lay bare as it were the process of stratification in his mind. Not indeed that their aim is other than useful: only that they seem to be inclined to underestimate the uncertainties of the problem and to be too hasty in summing up their conclusions.

It would be impossible in short limits to enter into the various questions suggested by this ingenious and erudite criticism of a 'Criticism'. Readers will find among the notes on the 'Vorrede' a rich collation of the passages in which Kant compares the plan and disposition of his enterprise to a court of justice where the opposing types of philosophic method and doctrine contend in arguments meant to win the verdict of reason in favour of their claims. They will probably be surprised at the variety of conception or misconception, to which the genitive (objective or subjective) in the title (Criticism *of* Pure Reason) leaves the way open. They will again and again be reminded of the twofold character of the problem: the problem of experience, and that of the *a priori* elements. They will see some account of the steps by which the distinction between analytic and synthetic judgments grew up in Kant, and of its true bearings, which a formal treatment of the distinction sometimes ignores. They will no longer be allowed to be guiltless in confounding the two senses in which Kant speaks both of Natural Science and of Metaphysics. They will find an attempt to present a clearer statement than is commonly given of the precise relation in which Kant's problem stands to that of Hume, both as Hume really dealt with it, and as Kant understood him to conceive it. Occasionally they may be annoyed at the tabular and numerical formality of certain arrangements and distinctions. But, after all, it will be impossible to refuse the admission that Dr. Vaihinger is engaged in a very necessary piece of work: that he

is taking every means to secure an adequate fulfilment of his self-imposed labour: and that no Kantian student should be without such an assistance towards the understanding of a book, which is not merely marked by obscurities of style, but pervaded by contrasts of doctrine. And perhaps such a reader may join with me in wishing Dr. Vaihinger health and strength to continue his arduous labour to a successful end.

W. WALLACE.

Anti-Kant, oder Elemente der Logik, der Physik und der Ethik. Von Dr. ADOLF BOLLIGER, Privatdocenten der Philosophie an der Universität zu Basel. Erster Band. Basel: Schneider, 1882. Pp. 407.

The contents of this book are described very well by the double title. It is a criticism of Kant accompanied by an exposition of the philosophical system of the author. In the present volume (which is to be followed by another) Dr. Bolliger criticises in detail the 'Introduction' to the *Kritik* (in Part I., pp. 11-148) and the 'Transcendental Æsthetic' (in Part II., pp. 151-407). The result to which his criticism leads him, as stated in an introductory chapter ("Ansicht und Absicht," pp. 1-8), is that "we must learn to forget Kant".

The first criticism that Dr. Bolliger makes is that Kant does not define knowledge, but begins with a division of it into "pure" and "empirical" knowledge. He ought to have asked himself first of all whether the problem of knowledge is "to reproduce in (adequate) representations an objective world or to analyse in judgments the world of representations". Dr. Bolliger takes the latter view—that all knowledge is analysis of representations. He holds that the whole of Kant's system implies the former view. In the first edition of the *Kritik* Kant may have come a little nearer to idealism in some respects, but the differences between the first and second editions are unessential. Dr. Bolliger always cites the second edition because it seems to him the fairest course to criticise a doctrine in the form that was finally given to it by its author.

Experience as much as knowledge requires definition. There are several ambiguities in Kant's use of the term "experience" (Erfahrung). One is that he sometimes distinguishes it (as "empirical knowledge") from "*a priori* knowledge," and sometimes regards it as having itself an *a priori* factor. Dr. Bolliger's position is that all knowledge is with respect to its object empirical, with respect to its function noetic or intellectual. If then we translate the Kantian *a posteriori* by "empirical" and *a priori* by "noetic" all knowledge is *a posteriori* and *a priori* at once. Kant therefore makes a cross-division when he divides knowledge into knowledge *a priori* and knowledge *a posteriori*. Truth is not attainable by a compromise such as that which is

attempted by Kant. The philosophical doctrine that will conquer is a developed Empiricism.

Dr. Bolliger's position with respect to judgment is that all right judgments are necessary because they are analytical. There is no need for the assumption of an *a priori* element in knowledge in order to explain the necessity of any class of judgments. Kant's doctrine is a superfluous means of defence against the scepticism of Hume,—a scepticism which had its origin in a mistaken view of the relation of cause and effect. Synthetic judgments, both *a priori* and *a posteriori*, in the Kantian sense, are impossible. Kant supposes conceptions (of body, for example, as having extension, figure and impenetrability) to which something is added in a synthetic judgment (weight, for example, to the conception of body). But in reality additions to our representations are made by experience only. After we have obtained new experience we analyse in judgments our complex of representations. This is true whether we add to our representations by means of the senses or by the substitute of imagination. Man as *knowing* can produce nothing. Kant confuses the problem of the theory of knowledge with a problem of psychology. If the world of experience is really produced by formal principles (the categories) out of an unknown matter, the problem still remains of analysing this world, of making it intelligible.

Near the end of the first part Dr. Bolliger discusses a question of terminology to which he attaches some importance. He has undertaken to show that no part of mathematics, of natural science, or of metaphysics is constructed out of synthetic judgments *a priori*. "Metaphysic is," he says, "the analytical science κατ' ἐξοχήν." But this term ought not to have been used; there was no need for any term but "Physic" in order to describe what is usually called Metaphysic. Under the conception of Physic come Logic and Ethic together with the theory of knowledge and the theory of good (Hedonic); for all this belongs to empirical science, and since the totality of empirical facts is called nature, to "Physic".

The discussion of the 'Transcendental Æsthetic' begins with a historical account of "the Interpretations of Representation to the time of Kant". Dr. Bolliger holds that ancient philosophy necessarily ended in scepticism because it assumed that knowledge consists in the reproduction by the mind of an object supposed to exist outside it. The ancient sceptics doubted everything except that which they ought to have doubted first, that is, whether it is quite certain that the end of thought is this impossible task of reproducing a world of things-in-themselves. Descartes resembles the ancient sceptics in this, that with all his scepticism he forgot to ask whether representations, in order to give us knowledge, must really reproduce objects. Unlike the ancient sceptics, he thought it possible to find a test of the truth of our ideas. The doctrines of Descartes, the Occasionalists, and Leib-

niz are only substitutes for the doctrine of the congruence (sometimes called identity) of our representations with something outside us, which was held in different forms by Plato and Aristotle. The true "doctrine of identity" is that the representation and the extended world are one and the same. Spinoza therefore did not arrive at this doctrine any more than the thinkers who have just been mentioned, for although he denies the duality of substance he asserts the duality of its attributes. Berkeley, instead of asking whether we really do see things *outside* ourselves, made a theory to explain this supposed fact. A second error of Berkeley's was that he did not see that each individual must actively create his own world and cannot be merely a passive recipient of ideas. Hume occupied himself chiefly with the problem of causation: he thought that causes must be sought in phenomena, and therefore concluded that no judgment about matters of fact is necessary. These two illusions are the beginning of the Critical Philosophy. In order to surmount scepticism Kant (1) brings back the ancient dualism of matter and form, (2) claims for the principle of form more importance than for that of matter, (3) seeks to place the principle of form within the mind. The development of Kant's doctrines by Fichte, Schelling and Hegel shows us "the ideal Kant". Kant's confusion of the cosmological (psychological) with the epistemological question not only remains throughout this development but becomes greater. The most important of the philosophers since Kant is Lotze with his phenomenalism on the one side and his view of causation on the other. Both these sides of his philosophy are indeed imperfectly developed, but he has done enough to give him a very high place among philosophers.

After this historical view Dr. Bolliger sets forth his "Positive view of the nature of Representations," under which term he includes all phenomena. He argues that representations ("Vorstellungen") imply a subject of representations ("ein Vorstellendes"), which is not itself a representation. This is "the soul," the absolute unity of which, as well as its existence, is proved by analysis of phenomena. The relation of the soul to its manifold representations is that of cause to effect. It must have in itself the power of producing them; this power is that by which we distinguish it from pure nothingness; the best name for a being in which this power is inherent is "cause". There is no causation in the phenomenal world. Souls are the only real causes. But the individual soul is not the *only* cause of its own representations. It produces its phenomenal world under the action of other beings. A "soul-monad" absolutely alone might produce a phenomenal world, but no change, no time could exist in this world. Such a soul would have produced in one phenomenal world the full effect due to it as a cause; to produce another world it must become another soul. But if we suppose that the soul is acted upon by other real beings we can explain the fact of

change, which consists in the disappearance of one phenomenal world to make room for another. Representation—that is, the production of these phenomenal worlds—is an expression of the momentary state of each soul under the action of other beings, or, more strictly, as Dr. Bolliger argues afterwards, under the action of one being that is in relation to all other beings. The soul is not limited to the body or to a part of it. The doctrine that it is thus limited leads to the absurd assumption of action at a distance, to the dogma that the soul is where it is not. If we must speak of place at all in relation to the soul, then the soul is the place of phenomena. The body and the material world and infinite space are in the soul. The soul is active not merely in the body but wherever there is a phenomenon. If it is asked what is the meaning ("der Sinn") of the world of representations, it may be replied that a thing has a meaning when it is adapted to an end. Now the only absolute end is happiness, and this end is attained or not attained equally whether the phenomenal world is called into existence by the soul or is a reproduction of a world of objects.

This "Analysis of Representations" is followed by an "Analysis of Concepts". It is maintained that Kant starts from a false view of concepts, and that this, like his false view of representations, prevails throughout the *Kritik*. Not only in the Kantian cosmology but also in the Kantian logic concepts rule; for according to Kant we judge by means of concepts. The true view of the concept is that it is merely a sum of many particulars ("ein Inbegriff vieler Einzelwesen"). It cannot, therefore, have the functions that Kant assigns to it. Concepts have their origin in judgments, not judgments in concepts.

Kant's distinction of Form and Matter is next discussed. Dr. Bolliger brings against the Kantian position the objections (1) that the antithesis of matter and form is "a metaphysical fiction," (2) that the compromise of Kant proceeds from a false opposition of "empirical" (identified with "received") and "*a priori*" (identified with "not received"). Both "form" (whatever may be meant by this term) and "matter" belong to experience, and are therefore empirical; both are produced by the soul, and are therefore *a priori*.

Dr. Bolliger continues the development of his own system in opposition to that of Kant in an "Analysis of Space" (pp. 268-375). Modern philosophers and the philosophers of classical antiquity have almost without exception taken a wrong view of space. The true view existed among the ancient civilised peoples of the East. From the East light came to the Greeks, but they were too immature to receive it in its fulness. The Greek philosophers regarded space as a μὴ ὄν. The true view is that it has a higher degree of reality than matter. It would be better to say that space is the *only* material of feeling—that everything else is mere form—than to say with Kant that space is a mere form. But this too would

be an error. "The antithesis of form and matter is with Plato as false as with Kant". Space is a monad; "single bounded spaces originate for us through a limitation and division of space in its state as a monad". Can we, in accordance with the view of causation that has been already explained, ascribe the production of space to the activity of the individual soul alone? This is impossible, for the idea of space is not changeless; there are intervals during which the consciousness of space ceases. The possibility is suggested that this cessation of the consciousness of space is brought about by the activity of innumerable other real beings, that there is no one being to whose action the consciousness of space is due. But it is maintained that a proof of the existence of one real being corresponding to the phenomenon of space may be found by developing as far as possible "naïve objectivism" and then interpreting the results, which must be regarded as symbols, in terms of phenomenalism. Dr. Bolliger proceeds, therefore, to construct "the Ideal of Materialism". His reason for seeking truth in a development of materialism is that this doctrine—the doctrine that everything can be explained by means of atoms and space—has gained more conquests over nature than any other philosophical doctrine.

Since gravitation varies with the distance, space must take part as a cause (the term being understood in the "naïvely objective" sense) in the production of motion. A difficulty of ordinary materialism is that the action of atoms on one another is inexplicable because they constitute a mere plurality. But space is a unity. It supplies, then, the bond of union that is wanting to the materialistic doctrine. Atoms must not be regarded as each filling a definite portion of space. Every atom "is where it acts". Since it acts on all other atoms it is everywhere. But although atoms are ubiquitous they are not, like space, equally active everywhere. Every atom is an infinite being that has its highest intensity at one point. By means of this theory of atoms all phenomena may be explained as results of one force—attraction. When this position has been reached it may be shown that even the attraction of atoms by one another is an unnecessary assumption. Since space acts directly on atoms they need not act at all on one another in order to produce the effects we observe. Atoms must not be regarded as lifeless. Life cannot belong to a group of atoms, but only to a single being, an atom. The brain is "a system of atoms under the constraint of which *one* atom actually lives, thinks, feels". All atoms are potentially alive. As living beings they come into relation with space only, just as we saw that they do as gravitating beings. Since atoms derive their activity from space this must be the one principle of the world, for a plurality of principles is inconceivable. Finally, a principle from which living beings emanate must be itself a living being.

Space and matter are phenomena and cannot therefore be real

causes. But from what has been proved on the ground of "naïve objectivism," as to the phenomenal world, we may infer the nature of the intelligible world. The real being that corresponds to the phenomenon of space is God. Thus the consequences of materialism lead to a theistic view of the universe.

Dr. Bolliger does not give a complete analysis of Time in this volume, but he states his view in general terms and offers some arguments in favour of it. He maintains in opposition to Kant that time is nothing apart from the succession of events. It is merely that which is common to all changes. The changeless elements of the intelligible world are the cause of change.

Whatever may be thought of the substance of these speculations, it must be admitted that Dr. Bolliger explains very clearly their deduction from the principles laid down. This character of his method makes it possible to state with brevity certain objections to his philosophic system.

The doctrine of "the intelligible world" depends on the positions that "the soul is a unity" and that it is "the cause" of phenomena. But if, with Dr. Bolliger, we include under "phenomena" all states of consciousness whatever, and at the same time deny the validity of the distinction of form and matter, "the soul," being neither a phenomenon nor a form of phenomena, is merely a cause of which we know nothing except that it *is* a cause. Dr. Bolliger refuses to apply the word "cause" to anything in the phenomenal world; it is therefore with him the name of one of the terms of an unknown relation, for he regards phenomena as coextensive with experience. His intelligible world, then, is a world of unknown beings each of which stands in an unknown relation to a phenomenal world of its own. It may, perhaps, be said that we must still assume that this intelligible world exists, because "die Vorstellungen" imply "ein Vorstellendes". This is an argument of a kind that is frequently used; but arguments of this kind tend to deprive philosophical language of its value. They contain the assumption that all words that are related etymologically to any philosophical term must have a real meaning in philosophy analogous to their meaning in daily life.

Dr. Bolliger's exposition of idealism or "phenomenalism" and of the doctrine that all knowledge consists in analysis of experience is perhaps the most valuable part of his book. One part of this exposition seems, however, to have led to some errors. In several passages it is denied that there was any need for the explanations given by Berkeley and by Lotze of the belief in an external world. A consequence of this view seems to be that extension in its unanalysed form is treated as if it had equal value as a datum of philosophy with the results of psychological analysis.

The criticisms of Kant are always interesting, though sometimes in the historical sections it seems as if Dr. Bolliger had

resolved to find good in all philosophers except Kant. This exaggeration is probably a reaction against the views of those who regard Kant as the greatest of all philosophers. Dr. Bolliger almost admits this when he says that it is the fault of the Kantians if his attack is more vehement than "the historical Kant" would deserve. But there are many empiricists who will not be disposed to accept the view that the distinction of form and matter as developed by Kant and his successors is worthless. One of the most important effects of the theory of evolution on philosophy has been that attempts have been made to find an expression of this distinction that shall be consistent with empiricism.

T. Whittaker.

VII.—NEW BOOKS.

[*These Notes do not exclude Critical Notices later on.*]

Inquiries into Human Faculty and its Development. By Francis Galton, F.R.S., &c. London: Macmillan, 1883. Pp. xii., 380.

The various important psychical researches by Mr. Galton, which have from time to time been noticed (or have appeared) in Mind—as to the formation of 'generic images' illustrated by composite portraiture, automatic representation, the statistical appreciation of differences of visualising power, &c.—are here incorporated with a multitude of other more or less cognate inquiries; all of them, though conducted through many years in apparent separation, having in his own mind been directed to the determination of the great practical question, whether it may not be possible to further and modify the process of natural evolution for the production of a more perfect humanity. It is impossible to give a notion of the variety and interest of the topics strung together by Mr. Galton as arguments towards his final conclusion that men not only may, but have it as a religious duty to, work intelligently towards shaping the course of the race's future. Among the sections of more directly psychological import, besides those mentioned above, attention may be drawn to that on "Sensitivity," followed by the one entitled "Sequence of Test Weights". Here Mr. Galton sets out a method of measurement which suggests the hope that he may apply his ingenuity in like manner to the senses generally. The sections on "Number-Forms," "Colour-Associations," and "Visionaries," bring together a great number of novel and surprising facts, made the more impressive by the engraved and coloured illustrations added at the end of the volume. In face of such mental peculiarities of individuals as he has been able to establish, Mr. Galton may well exclaim: "It will be seen in the end how greatly metaphysicians and psychologists may err who assume their own mental operations, instincts and axioms to be identical with those of the rest of mankind instead of being special to themselves." Whereas a psychologist hitherto, on noting a fact in his own mental experience, has assumed that it must hold good for all men alike, he is now by Mr. Galton's inquiries warned to expect that with other men the fact should rather be different. That does not make a science of psychology impossible, but enormously increases the need of circumspection in making general statements about the mind's action.

Prolegomena to Ethics. By the late Thomas Hill Green, M.A., LL.D., Fellow of Balliol College and Whyte's Professor of Moral Philosophy in the University of Oxford. Edited by A. C. Bradley, M.A., Fellow of Balliol College and Professor of Modern Literature and History at University College, Liverpool. Oxford: Clarendon Press, 1883. Pp. xxxv., 427.

The three articles contributed by the lamented author to Mind XXV.-VII., under the title "Can there be a Natural Science of Man," fill (with four introductory pages) the first 103 pp. of this work in its final shape as now published. It is disposed by the editor in four Books: "Metaphysics of Knowledge" (pp. 10-89); "The Will" (pp. 90-159); "The Moral Ideal and Moral Progress" (pp. 160-314); "The Application of Moral Philosophy to the Guidance of Conduct" (pp. 315-427). The book is unfinished but not abruptly broken off. The editor has provided (with help from Prof. Caird) a very full and elaborate analytical Table of Contents (pp. ix.-xxxv.). He mentions that it is hoped that before long Green's published writings will be collected and edited, together with a short biography and selections from his unpublished MSS.

The Principles of Logic. By F. H. Bradley. London: Kegan Paul, Trench. Pp. xvi., 534.

The author sends the following:—

"The above work may be described as an attempt to answer two questions, What is Judgment, and What is Reasoning, and is a treatment of some of the topics which those questions involve. The distinction between the Categorical and the Hypothetical Judgments, and the failure to justify that distinction rationally, led the writer to discuss the whole question of Judgment and to consider its main species. He has added under Modality an account of the principles of the doctrine of Chances. The second question, What is Reasoning, was suggested by the failure alike of the Syllogism and of all the substitutes offered. Mill's Deductive Methods and Professor Jevons's Equational Logic are criticised in detail, and an attempt is made to show that the *ordinary* doctrine of the Association of Ideas is no basis for Logic, being itself an error. Inference is then found to be any ideal experiment which gives us a new truth, and an effort is made to exhibit the main varieties of these experiments and to penetrate to their inner nature. The formal and the real validity of reasoning are the subjects which then bring the volume to a close."

Ethic demonstrated in Geometrical Order, &c. By Benedict de Spinoza. Translated from the Latin by William Hale White. ("English and Foreign Philosophical Library," XXI.) London: Trübner, 1883. Pp. xxxviii., 297.

The translator states that he completed his work more than twenty years ago, but withheld it because of the little interest then taken in Spinoza. It has not now been published without

being subjected to thorough revision and considerable modification by Miss Stirling, the daughter of Dr. J. Hutchison Stirling. The result, as far as we have been able to examine, is a very careful and exact rendering, giving evidence throughout of patient and sympathetic insight. It is a great advance upon the earlier translation of the *Ethica* by R. Willis, published by the same house, and now, we may suppose, intentionally superseded by this new volume of the "English and Foreign Philosophical Library". The rendering of the Latin 'Affectus' by the obsolete English word 'Affect' (used by Shakespeare) is somewhat repellent at first sight but justifies itself upon consideration, the word 'Affection' being required for Spinoza's 'Affectio' and 'Passion' for 'Passio': the choice indeed gives proof of the intelligence that has been brought to bear upon the work. The translator's Preface brings out some of the salient features of Spinoza's thought in a striking and original way. A useful Index is appended.

Outlines of the Philosophy of Aristotle. Compiled by Edwin Wallace, M.A., LL.D., Fellow and Tutor of Worcester College, Oxford. Third Edition, enlarged. ("Pitt Press Series"). Cambridge: University Press; London: Cambridge University Press Warehouse, 1883. Pp. 130.

The author thus describes the new matter in this Edition, enlarged to almost double the size of the previous one:—

"I have added an introductory chapter [pp. 1-16] on the way in which Aristotle sought to meet the difficulties of preceding thinkers and on the general drift of his own philosophy. I have considerably expanded the chapter on Aristotle's Logic; and, throughout, I have supplemented the Greek extracts when it seemed to me that by adding a few additional words Aristotle's meaning was made more obvious. But I have also, I hope, facilitated the study of the Greek by interpolating occasionally short explanatory notes."

The Science of Man: A Manual of Anthropology based on Modern Research. By Charles Bray, Author of *The Philosophy of Necessity*, &c. Second Edition. London: Longmans, Green [1883]. Pp. xv., 323.

The author has made some additions to his work as it first appeared; the argument and discursive treatment remaining what they were. It is, as originally described, an "application of the Conservation, Transmutation, and Dissipation of Energy to Mind, Morals and Religion"; an endeavour "to show the conditions under which physical force or *automatic mind* again resumes its consciousness; how the Persistence of Force and Philosophical Necessity or Law in Mind are the same, and how therefore our ethical systems may and must be brought into harmony with this now known fact"; also "to show the Unity of Force, and that all Power is Will Power, conscious or automatic".

The Pedigree of Man: and other Essays. By Ernst Häckel. Translated, with the Author's permission, from the German. By Edward B. Aveling, D.Sc., Fellow of University College, London. With 80 Woodcuts. ("International Library of Science and Freethought," VI.) London: Freethought Publishing Company, 1883. Pp. xv., 352.

An excellent translation of the two series of Popular Lectures collected by the author in 1878-9, having been delivered within the fifteen previous years. Two in particular, "On Cell-Souls and Soul-Cells," and "On the Development of Life Particles and the Perigenesis of the Plastidule" have an interest for philosophical readers. The concluding lecture "On the Origin and the development of the Sense-Organs" becomes unsatisfactory when it touches on the most interesting question of all—the development of the eye.

Sir William Hamilton: The Man and his Philosophy. By John Veitch, LL.D., Professor of Logic and Rhetoric in the University of Glasgow. Edinburgh and London: Blackwood, 1883. Pp. 68.

Two Lectures recently delivered before the Edinburgh Philosophical Institution, in which the author gives one more sketch of Hamilton's life, and in expounding his philosophy finds time also for thrusts at Mill on the one hand and Hegel on the other.

The Creed of a Modern Agnostic. By Richard Bithell, B.Sc., Ph.D. London: Routledge, 1883. Pp. 153.

An attempt to explain the theoretical basis and set forth the practical outcome of "Agnosticism". The book is written with intelligence and in a serious spirit.

Studies in Logic. By Members of the Johns Hopkins University. Boston: Little & Brown, 1883. Pp. 203.

A collection of six papers by students under Prof. C. S. Peirce at Baltimore, with an essay on "Probable Inference" (pp. 126-86) by himself. The others are concerned with Symbolic Logic, after the first which gives an acccount of the Logic of the Epicureans (by A. Marquand). We hope to return to this volume.

Philosophy of Landscape Painting. By William M. Bryant. St. Louis, Mo.: St. Louis News Co., 1882. Pp. 282.

The author seeks to show that there could be no true landscape-art till the modern scientific view of nature, with its necessary complement the scientific view of man, had been developed. He then considers the elements, conditions, limits and divisions

of this kind of art; and concludes with a sketch of the historical development of landscape painting. He acknowledges obligations to Hegel in particular, and to Vischer and other writers in general.

Les Maladies de la Volonté. Par Th. Ribot. Paris: Germer Baillière, 1883. Pp. 180.

M. Ribot has in this volume followed up his new and interesting line of psychological inquiry, mental pathology. The present volume answers closely in form and mode of treatment to the previous *Les Maladies de la Mémoire*, noticed in Mind. Review will follow.

La Physique Moderne: Études historiques et philosophiques. Par Ernest Naville, Correspondant de l'Institut de France. Paris: Germer Baillière, 1883. Pp. 278.

The author, whose *Logique de l'Hypothèse* was noticed in Mind XVIII., 294, finds in these studies a confirmation of his views on scientific method. They deal successively with (1) the Characters of Modern Physics (scientific, logical, æsthetic); (2) its Origins (chiefly in the work of Descartes); (3) the Philosophy of its Founders (where the author traces the influence of religious beliefs on the governing principles of physics in the minds of some of the chief physical inquirers from Copernicus to Faraday and Mayer, and also draws out the consequences of scientific atheism). In a fourth study he considers Physics in relation to Morality, and denying the universality of the Conservation of Energy reconciles this physical principle with human liberty. The concluding study deals with the Philosophical Consequences —as to matter and mind and the idea of Creation (which is found to be confirmed by the whole course of physical inquiry, when rightly understood).

Revision der Hauptpunkte der Psychophysik. Von Gustav Theodor Fechner. Leipzig: Breitkopf u. Härtel, 1882. Pp. 427.

Instead of undertaking, at his advanced age, the revision of the famous *Elemente der Psychophysik*, so long out of print, with a view to a second edition, the venerable author has here produced an independent work, in which he practically traverses the whole ground of his original research but does so in express relation to the various critics who, especially of late years, have sifted every part of the psychophysical theory. In particular he has been stirred up to the task by the critical work of Prof. G. E. Müller of Göttingen, *Zur Grundlegung der Psychophysik*, which appeared in 1877 just after the smaller book, *In Sachen der Psychophysik*, in which the author last delivered himself on the subject so closely identified with his name. He does not find

himself driven even by Müller, still less by other opponents, to alter anything in his fundamental conceptions, but, in meeting their hostile criticism and reviewing the large amount of independent psychophysical investigation carried out since the appearance of the *Elemente*, he has many new considerations opened up for him. The book is divided into eight parts, the titles of which will give a preliminary view of its scope:—(1) On the Import of Psychophysic; (2) Principles and Methods of psychophysical Measurement; (3) Psychophysical Laws; (4) Psychophysical Ground-formulæ (with consideration of the negative values entering into them); (5) Conflict between the *psychophysical* and *physiological* views (with remarks on Wundt's *psychological* interpretation of Weber's Law and the part played by Attention in the case); (6) Some subjects of Internal Psychophysic (Attention, Waking, Sleep and Dreams, Memory); (7) Special Replies to Critics; (8) Review of various series of Psychophysical Researches.

Grundzüge der Logik u. Encyclopädie der Philosophie. Dictate aus den Vorlesungen von Hermann Lotze. Leipzig: Hirzel, 1883. Pp. 120.

The sixth of the series of Lotze's paragraphs for dictation in lecture; those on Metaphysic and Æsthetic now alone remaining to be published. In the present issue, Logic fills 83 pp., the main division of the subject being in the usual terms, Pure and Applied. *Encyclopädie* is disposed under four heads: (1) Meaning and Problems of Philosophy, (2) Theoretic Philosophy, (3) Investigations of Values *(die Werthe)*, (4) Philosophy of Religion.

Geschichte der neuern Philosophie. Von Kuno Fischer. III. u. IV. Bände. Dritte neu bearbeitete Auflage. München: Bassermann, 1882. Pp. xx., 576; xviii., 516.

Since issuing in 1880 the third edition of Vol. I. 2 ("Spinoza") of his well-known *Geschichte*, Prof. K. Fischer has been busily employed in revising his Vols. III. and IV., containing the full exposition of Kant. Vol. II. "Leibniz and his School," remains on sale in the second edition, and as Vol. V., "Fichte and his Predecessors" is out of print, it is probably this rather than the earlier volume that the author will next take in hand. The revision, in the case of Vols. III. and IV., has been even more thoroughgoing than in the two parts of Vol. I., as might have been expected from the extraordinary quantity of recent Kantian literature of which account had to be taken. The chief obvious additions in Vol. III. are a detailed exposition of Kant's works in physical science and an important concluding chapter (pp. 545-76), "The various Expositions of the *Vernunftkritik*," in which he not only discusses at length the question of the two Editions, but also reckons with the movement of "Kant-philology" and in

particular repels B. Erdmann's theory of the heterogeneous composition of the *Prolegomena*. Room is found for these additions and for the introduction of a multitude of new observations throughout the exposition, by the sacrifice of all the controversial notes (against Trendelenburg) which bulked so largely in the previous issue of the volume. In Vol. IV., there is also considerable change, the doctrine of the *Critique of Judgment* having now due prominence given to it in a separate Book 3, instead of being tacked on as a second section to the "Philosophy of Religion" as first section of Book 2. Book 2 in the present edition bears the new title of "The Kantian Doctrine of Religion and the Conflict between Established Order *(Satzung)* and Criticism". For the rest, the author maintains his original exposition, according to which *The Critique of Pure Reason* forms the sole basis of a "System of Reason" into which, after "Metaphysic of Nature," the other two *Critiques* are taken up as not of the same fundamental importance. This dislocates the relation in which the three *Critiques* are naturally thought of as standing towards each other; but on the other hand it cannot be maintained that Kant worked out the three as, in the same sense, bases of a philosophical construction. Such as it is, the author's exposition may now more than ever rank as the best and completest presentation of the Critical doctrine. It should, however, be added that he might with advantage have extended his view of recent Kantian literature beyond what has appeared in Germany only.

Untersuchungen über die Methode der Socialwissenschaften und der Politischen Oekonomie insbesondere. Von Carl Menger, o. ö., Professor der Staatswissenschaften an der Wiener Universität. Leipzig: Duncker u. Humboldt, 1883. Pp. xxxii., 291.

This is not an attempt to formulate the methods of the social sciences and political economy in particular, for which, according to the author, the time is not ripe. It is an attempt to fix the true conception of political economy and define its province within and without, in face of the different conceptions that have gained currency in Germany since the older orthodox system of the Adam Smith school ceased to prevail; the critical consideration being directed mainly to the methodological aspects of each.

Grundzüge der Moral. Gekrönte Preisschrift. Von Dr. Georg von Gizycki, Privadocent an der Universität zu Berlin. Leipzig: Friedrich, 1883. Pp. 140.

This essay had awarded to it, over sixty-five others, the prize offered by the Berlin Freethinkers' Society "Lessing" for a popular exposition of morality "based exclusively on unquestionable facts of natural knowledge": the judges were Professors H.

Grimm and Scherer, and Deputy Dr. E. Lasker. The author, who has distinguished himself by his attention to English Ethical Philosophy, adopts "the greatest possible happiness of all" as his principle, and having worked up to this in the first part of his essay applies it in the second part. Inquiring finally into the motives determining to right action, he concludes:—"In a word, the foundation of morality is not merely 'conscience,' or 'self-interest,' or 'benevolence,' or 'social impulse,' or 'sympathy,' or 'reason,' or any single power in man: it is the whole—feeling, willing, thinking—man."

La Legge del Tempo nei Fenomeni del Pensiero. Saggio di Psicologia Sperimentale di Gabriele Buccola, Docente di Psichiatria nella Regia Università di Torino. Con Incisioni e Tavole litografiche. ("Biblioteca Scientifica Internazionale," XXXVII.) Milano: Dumolard, 1883. Pp. xv., 432.

For some time past, there has been no European country displaying more psychological activity than Italy, and the present work (part of which we have noted as appearing from time to time in the *Rivista di Filosofia Scientifica*) is a proof with what fruitful result. It is a very exhaustive investigation of the Time taken by the different psychical processes, embodying the results of much original experiment as well as reproducing those of earlier inquiry. After dealing with the recognised general conditions of the investigation, the author deals successively with (1) the circumstances that modify the time of reaction, (2) the duration of the elementary psychical process in the insane, (3) reaction-time and the sense of tactile space, (4) the time of discrimination and of volitional determination, with the variations of each, (5) the duration of complex perceptions and association of ideas, (6) duration of reproduction (of perceptions of movement in visual and in tactile space), (7) the sense of time, (8) the phenomena of organic memory. It will be seen that the treatise covers ground that has been little worked over in this country; and it is much to be desired that this might be one of the works in the "International Scientific Series" to be translated into English. But the task would need a competent hand and head.

Le Teorie nativistische e genetiche della Localizzazione spaziale. Saggio critico di Giovanni Cesca, Dottore in Filosofia e Lettere. Verona, Padova: Drucker e Tedeschi, 1883. Pp. 160.

The author, who is one of the most active workers of the Italian scientific school, has here reviewed the later psychological discussions of the Space-question with the following result: —

"(1) The problem of the notion of space has not been solved by any of the theories: the one future theory that will be valid and will solve the problem will be a psychogenetic theory of the representation of something outside the Ego, whose parts are outside one another.

(2) The problem of the determination of spatial position has been definitively solved by the theory of the genetic associative school.

(3) The problem of the distinction of simultaneous sensations of the same kind has been definitively solved by Lotze's theory of local signs.

(4) The problem of determining the position of a sensation has been definitively resolved by the genetic theories of Lotze and of Wundt; which have, however, to be corrected in the secondary point of having muscular sensations substituted for sensations of innervation, whose existence is not made good."

Body and Will: Being an Essay concerning Will in its Metaphysical, Physiological and Pathological Aspects. By Henry Maudsley, M.D. London: Kegan Paul, Trench, 1883. Pp. viii., 342.

The following extract is from the Preface of this *presently forthcoming* work:—

"This Essay has had its beginnings in lectures and addresses which I have given on different occasions during the last ten years; the themes of which were Conscience and Organisation, the Physical Basis of Will, Lessons of Materialism, and the like. The design, entertained vaguely for some time, of collecting them into a book was abandoned, because it was evident that the treatment of the subject in that loose way would not be sufficiently concise and methodical, or indeed adequate. Thereupon this essay on Will in its metaphysical, physiological, and pathological relations was undertaken, in order to have unity of subject and to treat it systematically and with more pretence to completeness. The freedom of a spiritual will being the stronghold of a metaphysical psychology, there can be no accusation of evading difficulties when that is selected as test-subject of the value of the doctrines arrived at by the positive method of observation and induction. If the method fails there, its fundamental incompetence must be frankly admitted."

VIII.—MISCELLANEOUS.

The Rev. John Owen, author of *Evenings with the Skeptics*, noticed in the last No. of MIND, sends the following:—

While I feel very grateful to Dr. Burns-Gibson for his kindly notice of my *Evenings with the Skeptics*, I should be glad to be allowed to explain one or two misconceptions which he seems to have formed as to the aim of the work, and also to assign a few reasons for crediting William of Occam with a larger share of mysticism than Dr. Burns-Gibson seems inclined to allow him.

As to the first point: The primary object of the book is to consider the relation of pre-critical thought at different epochs to the prevailing dogmatic structures, philosophical or theological, of the same periods. Such an attempt necessitates a division of the great thinkers of history into Analytical and Constructive and a stress, especial if not exclusive, on the former. Now while I am prepared to acknowledge that a complete demarcation of the analytical from the synthetical thinker is a matter of some difficulty, a sufficiently approximate criterion may be found by inquiring as to any particular philosopher, What was the *chief* effect produced by his teaching upon the current beliefs of his time? Judged by this rule it seems evident that while, *e.g.*, Sokrates and Plato exercised a disintegrating effect on Greek thought, the chief influence of Aristotle was of a different kind. His work consisted mainly in arranging and systematising what he regarded as the most reliable products of Greek speculation, and its effect was therefore constructive and dogmatic. As to Duns Scotus my reason for not including him among the disruptive agents of mediæval theology was partly want of space, partly that his most salient qualities are manifested in the work by the more influential thinkers Erigena and Abelard. I may add that want of space compelled me to omit a more important contribution to mediæval free thought than that supplied by Duns Scotus, *viz.*, the fascinating episode of free inquiry represented by Arab thinkers, especially Averroes and Al Ghazzali. This omission I regard as serious and hope to supply at some future time.

Giordano Bruno, whose presence among my "Skeptics" Dr. Burns-Gibson seems to think strange, claims a place as representing in a very striking manner a mode of thought which made havoc of mediæval theology. I should be the last to deny the large proportion of constructive thought in his philosophical system, but his synthesis is based upon the new Copernican astronomy. In respect of the general thought of his time, his influence seems to me to have been altogether destructive.

As regards more modern thinkers adduced by Dr. Burns-Gibson, I quite agree with him that Hume, Kant, and Mill ought to find a place in every complete catalogue of analytical and free thinkers, and they are included in my own conspectus. Hamilton I do not think deserves to be placed among them. Both his aims and influence were constructive.

Dr. Burns-Gibson finds fault with my treatment of Occam. He thinks I have underrated his scepticism and taken too seriously his mysticism. If I had confined my attention to the *Quodlibeta* and *Centilogium*, I should, no doubt, have made him not only an inquiring and suspensive, but a denying sceptic. But the works just named form but a small portion of his writings, and in his remaining works, especially his great work on the *Sentences* and his *Dialogues*, his mysticism assumes a clear and distinct form, and is urged with so much force and evident *bona fides* that it seems

to me impossible not to take it seriously. Besides, mysticism formed one of the leading characteristics of the Spiritual Franciscans—Occam's comrades in the struggle against Rome, and it is easy to see the advantage their polemic derived from the adoption of such a standpoint. I need hardly remind Dr. Burns-Gibson that a scepticism more or less avowed in external dogma and mere traditional belief is not only compatible with mysticism, but is oftentimes its cause and starting point.

Dr. G. M. Beard of New York, whose writings on Trance and related subjects have repeatedly been noticed in MIND, died in January last at the age of 43.

Mr. Herbert Spencer, who was lately elected Corresponding Member of the *Académie des Sciences Morales et Politiques*, has declined the honour on grounds of principle.

Messrs. Trübner & Co. will publish in October Vol. I. of the translation of Schopenhauer's *Welt als Wille u. Vorstellung*, by Messrs. R. B. Haldane and J. Kemp. This volume, embracing the first four books of the original, will contain a complete exposition of Schopenhauer's own system. Vols. II. and III. of the translation, to follow, will contain the criticism of Kant's Philosophy and the "Ergänzungen". The same publishers announce for December the long-promised translation of v. Hartmann's *Philosophie des Unbewussten*, by Mr. W. C. Coupland.

THE JOURNAL OF SPECULATIVE PHILOSOPHY.—Vol. XVI. No. 4. W. H. Kimball—Fate and Freedom. Hegel—On the Absolute Religion (trans.). J. Ward—A General Analysis of Mind. J. Burns-Gibson—On Some Idols or Factitious Unities. Kant—Anthropology (trans.). Trentowski—On the Sources and Faculties of Cognition. Notes and Discussions.

REVUE PHILOSOPHIQUE.—VIIIme Année, No. 4. A. Fouillée—Les arguments psychologiques en faveur du libre arbitre. Ch. Secrétan—La métaphysique de l'eudémonisme, du pessimisme et de l'impératif catégorique. A. Binet—Du raisonnement dans les perceptions. Note (M. Guyau—Sur les modifications artificielles du caractère dans le somnambulisme provoqué). Analyses et Comptes-rendus. Rev. des Périod. No. 5. Ch. Bénard—La vie esthétique. F. Paulhan—L'obligation morale au point de vue intellectuel. Fonsegrive—Sur les prétendues contradictions de Descartes. Note (M. L. Dauriac—Les origines logiques de la doctrine de Parménide). Analyses, &c. (E. Wallace—*Aristotle's Psychology*, &c.). Notices bibliographiques. Rev. des Périod. No. 6. A. Fouillée—Le libre arbitre et la contingence des futurs. Beaunis—Sur la comparaison du temps de réaction pour les différentes sensations. P. Tannery—Études de philosophie ancienne : Anaximène et l'unité de substance. Fonsegrive—Sur les prétendues contradictions de Descartes (fin). Revue Générale (G. Tarde—Quelques criminalistes italiens de la nouvelle école). Analyses, &c. Rev. des Périod.

LA CRITIQUE PHILOSOPHIQUE.—XIIme Année, Nos. 1—20. C. Renouvier—Réponse à différentes objections contre le principe juridique de la morale (1) ; Une espèce du pessimisme à propos de l'étude de M. Scherer sur Amiel (12) ; Politique et socialisme : xiv. La philosophie de Fourier (14, 16). Georges Noel—Le nombre et l'espace (3). Sh. H. Hodgson—Philosophie de la réflexion (trad., 3, 5, 7, 8, 9). A. Penjon—Cours de philosophie (6). F. Grindelle—Les petits traités d'éducation morale et

civique (8, 11, 13). F. Pillon—À propos de la notion de nombre (9, 11, 12, 15); Quatre anciens manuels ou catéchismes d'instruction morale et civique (17, 18, 19, 20). A. Naville—La science et l'art (13). L. Dauriac—De la psychologie independante: Evolutionnisme et criticisme (16); L'origine des métaphysiques (17).

La Filosofia delle Scuole Italiane.—Vol. XXVI. Disp. 2. G. Barzellotti—L'idealismo di A. Schopenhauer e la sua dottrina della percezione. T. Davidson—Rosmini falsamente accusato dinanzi a Leone XIII. T. Mamiani—Osservazione sull' articolo che antecede. P. Ragnisco—Il principio di contraddizione in Aristotele. C. Cantoni—Lettera a T. Mamiani. T. M.—Filosofia giuridica. A. Chiappelli—Panezio di Rhodi e il suo giudizio sulla autenticità del *Fedono*. T. M.—Ancora del primo fatto e del primo vero. Disp. 3. T. Ronconi—Del nome comune. G. S. Tempia—Il valore educativo degli studi sociali e la cultura femminile. A. Paoli—La logica di Gugl. Wundt. F. Tocco—F. Masci, *Le idee morali in Grecia prima di Aristotele*. B. Bertinaria—Fondamenti filosofici della scienza politica. T. Mamiani—Di nuovo del primo fatto e del primo vero. Notizie, &c.

Rivista di Filosofia Scientifica.—An. II. No. 2. R. Ardigò—Empirismo e scienza. G. Trezza—Il Darwinismo e le formazioni storiche . . . Riv. Sint. (G. Sergi—L'antropologia moderna). Riv. Anal. (G. J. Romanes, *Animal Intelligence*), &c. No. 3. . . . L. Paolucci—Studi di psicologia comparata. Il linguaggio degli uccelli: i. Sulla struttura fonetica delle voci usate dagli uccelli. . . . &c.

Zeitschrift für Philosophie, &c.—Bd. LXXXII. Heft 2. W. Schuppe—Was sind Ideen? (ii.) R. Eucken—Fortlage als Religionsphilosoph. M. Sartorius—Die Entwicklung der Astronomie bei den Griechen bis Anaxagoras u. Empedokles, in besonderem Anschluss an Theophrast (i.). G. Neudecker—Denknothwendigkeit u. Selbstgewissheit in ihrem Erkenntnisstheoretischen Verhältniss (mit erläuternden u. berichtigenden Anmerkungen von H. Ulrici). C. B. Braig—Der Pessimismus in seinen psychologischen u. logischen Grundlagen. Recensionen. Bibliographie.

Philosophische Monatshefte.—Bd. XIX. Heft 3, 4. B. Erdmann—Eine unbeachtet gebliebene Quelle zur Entwicklungsgeschichte Kant's. J. H. Witte—Die angebliche "Blattversetzung in Kant's *Prolegomena*". Recensionen u. Anzeigen. Litteraturbericht. Bibliographie, &c. Heft 5. E. Feuerlein—Die Selbstpflicht im System der Moral. Recensionen u. Anzeigen. Bibliographie, &c.

Zeitschrift für Völkerpsychologie u. Sprachwissenschaft.—Bd. XIV. Heft 3. J. Duboc—Kant u. der Eudämonismus (mit Bemerkung dazu von H. Steinthal). F. Misteli—Die theorie der Abschleifung im Indogermanischen u. Ugrischen. A. Bastian—Masken u. Maskereien.

Vierteljahrsschrift für wissenschaftliche Philosophie.—Bd. VII. Heft 2. J. Jacobson—Philosophische Untersuchungen zur Metageometrie (i.). F. Tönnies—Studie zur Entwicklungsgeschichte des Spinoza (i.). B. Erdmann—Logische Studien (ii.). Anzeigen. Selbstanzeigen, &c.

Other Books, &c., received: J. W. Reynolds, *The Supernatural in Nature*, 3rd Ed., pp. 509, and *The Mystery of Miracles*, 3rd Ed. London (Kegan Paul, Trench). K. Pearson, *The Ethic of Freethought*, London (E. W. Allen), pp. 16. A. Wysard, The Intellectual and Moral Problem of Goethe's *Faust*, London (Trübner), pp. 80. J. Griesland, *Genie de l'Homme: Libre Philosophie*, Paris (Germer Baillière), pp. 374. P. Piper, *Schriften Notker's u. seiner Schule*, II. 1, Freiburg i. B., u. Tübingen (Mohr), pp. 224.

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MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

I.—PSYCHOLOGICAL PRINCIPLES.

II. FUNDAMENTAL FACTS AND CONCEPTIONS.

In a preceding article (Mind XXX., 153) it was argued that the standpoint of psychology is individualistic: by whatever methods, from whatever sources its facts are ascertained, they must—to have a psychological import—be regarded as having place in, or as being part of, *some one's consciousness*. In this sense, *i.e.*, as presented to an individual, "the whole choir of heaven and furniture of earth" may belong to psychology, but otherwise they are psychological nonentities. The problem of psychology, in dealing with this complex subject-matter, is in general—first, to ascertain its constituent elements, and secondly, to ascertain and explain the laws of their combination and interaction.

As to the first, there is in the main substantial agreement: the elementary facts of mind cannot, it is held, be expressed in less than three propositions: I feel somehow, I know something, I do something. But here at once there arises an important question which claims our attention before we attempt to discuss the meaning or the merits of the accepted analysis, the question, *viz.*, what we are to understand by the subject of these propositions. Nobody nowadays would understand it to imply that every psychical fact must be ascertained or verified by personal introspection: perhaps no modern writer ever did understand this; at any rate to do so

is to confound the personal with the psychological. We are no more confined to our own immediate observations here than elsewhere; but the point is that, whether seeking to analyse one's own consciousness or to infer that of a lobster, whether discussing the association of ideas or the expression of emotions, there is always an individual mind or self or subject in question. It is not enough to talk of feelings or volitions: what we mean is that some individual, man or worm, feels, wills, acts—thus or thus. Obvious as this may seem, it has been frequently either forgotten or gainsaid. It has been forgotten among details or through the assumption of a medley of faculties, each treated as an individual in turn, and among which the real individual was lost. Or it has been gainsaid, because to admit that all psychological facts pertain to a psychological subject seemed to carry with it the admission that they pertained to a particular spiritual substance, which was simple, indestructible, and so forth; and it was manifestly desirable to exclude such assumptions from a psychology which aims only at a scientific exposition of what can be known and verified by observation. But the psychological conception of a self or subject is by no means identical with the metaphysical conceptions of a soul or mind-atom, or of mind-stuff not atomic; it may be kept as free from metaphysical implications as the conception of the biological individual or organism with which it is so intimately connected.

It would, however, be a mistake to seek to explain the individuality of the psychological subject by reference to the individuality of the organism. Yet this mistake has been made by those who represent the individual mind as a complex of faculties which work consentiently like the organs of the body, and are sometimes active and sometimes quiescent. As a man has legs whether he is walking or not, so they suppose he has a memory, whether remembering or not; but the analogy is false. If we find anything among the facts of psychology corresponding to the parts or organs of the animal body, these would rather be the ideas, objects or presentations which constitute the contents of consciousness. In the unity of this content at any one moment and its continuity from moment to moment we have indeed a certain counterpart to the unity and continuity of the body. Still this unity and continuity of consciousness is not what we mean by the psychological subject; on the contrary, we look to this subject for an explanation of this unity. And we may have to look to it too for an explanation of the unity of the organism. At any rate, as soon as the biologist regards the organism as

adapted to the end of living, of surviving in a struggle for life, thereby giving to life a meaning other than that of a series of physical processes, he has changed his front; for such teleological references imply feeling and effort or impulse as the result of feeling: and it is just these purely psychological facts of feeling and impulse that compel us to recognise a subject of consciousness as well as a unity and continuity of consciousness.

Still the attempt has frequently been made to resolve the former into the latter, and so to find in mind only such an individuality as has an obvious counterpart in this individuality of the organism; *i.e.*, what we may call an objective individuality. But such procedure obtains all its seeming conclusiveness through leaving out of sight the difference between the physical and the psychological standpoints. The biologist in describing the anatomy and physiology of an animal or plant can do so entirely in terms of matter and motion. If all he means by dog is a certain wondrous complex of protoplasm or cells, then a dog = "the sum of the phenomena which make up this corporeal existence".[1] To say this sum of phenomena = only the body of the dog, as if the dog itself were some distinct phenomenon or further corporeal existence, in the sense in which the tail of the dog is distinct from the trunk, is then, no doubt, to lapse into the mythical and cheat oneself with mere figments of the imagination. The dog as a complex object or phenomenon for the biologist may be described as a sum of simple objects or phenomena, in so far as it is nothing distinct from, or additional to, this sum; and inasmuch as the presentation to anyone in particular is a matter of no importance, the fact of presentation at all may be very well dropped out: the biological dog is a complex unity and that is all. Let us now turn to mind: "leaving aside the problem of the substance of the soul," why should we not here take "the word 'soul' simply as a name for the series of mental phenomena which make up an individual mind"? Surely the moment we try distinctly to understand this question, we realise that the cases are different. "Series of mental phenomena" for whom? For any passer-by such as might take stock of our biological dog? No, obviously only for that individual mind itself. But then that is supposed to be made up of, to be nothing different from, the series of phenomena. Are we, then, (1) quoting J. S. Mill's words, "to accept the paradox that something which *ex hypothesi* is but a series of feelings,

[1] Prof. Huxley, *Hume*, p. 171.

can be aware of itself as a series"? Or (2) shall we say that the several parts of the series are mutually phenomenal, much as Jones may look at Robinson who was just now looking at Jones? Or (3) finally, shall we say that a large part of the so-called series, in fact, every term but one, is phenomenal for the rest—for that one?

As to the first alternative, paradox is too mild a word for it; even contradiction will not suffice: it is simple, or rather complex, nonsense. It is as impossible to express "being aware of" by one term as it is to express an equation or any other relation by one term: what knows can no more be identical with what is known than a weight with what it weighs. If a series of feelings is what is known or presented, then what knows, what it is presented to, cannot be that series of feelings, and this without regard to the point Mill mentions, *viz.*, that the infinitely greater part of the series is either past or future. The question is not in the first instance one of time or substance at all, but simply turns upon the fact that knowledge or consciousness is unmeaning except as it implies something knowing or conscious of something.[1] But it may be replied:—Granted, the formula for consciousness is something doing something, to put it generally; still if the two somethings are the same when I myself shave myself or when I see myself, why may not agent and patient be the same when the action is knowing or being aware of; why may I not know myself—in fact, do I not know myself? Certainly not; agent and patient never are the same in the same act: the conceptions of Self-caused, Self-moved, Self-known, *et id genus omne*, either connote the incomprehensible, or are abbreviated expressions—such, *e.g.*, as Self-shaved = One's hand shaved one's chin.

Let us try the second alternative:—As one hand washes the other, may not different members of the series of feelings be subject and object in turn? In the facts of that higher form of psychical life which we call self-consciousness there is much that would answer to this description. Compare, for example, the state of mind of a man succumbing to temptation (as he pictures himself enjoying the coveted good and impatiently repudiates scruples of conscience or dictates of prudence), with his state when, filled with remorse, he sides with conscience and condemns this "former

[1] A relation which it would often be convenient to symbolise for readier reference. Diagrammatically we might represent it by the relation of the centre of a circle to its circumference; or graphically as $\overline{SPO}$ or $\overline{OPS}$, *i.e.*, subject perceiving object, or object perceived by subject.

self"; the "better self" having in the meantime revived. Here the cluster of presentations and their associated sentiments and motives, which together play the *rôle* of self in the one field of consciousness, have—only momentarily it is true, but still have for a time—the place of not-self: and under abnormal circumstances this partial alternation may become complete alienation, as in what is called "double consciousness". Or again, the development of self-consciousness might be loosely described as taking the subject or self of one stage as an object in the next; self being, *e.g.*, first identified with the body and afterwards distinguished from it. But all this, however true, is beside the mark; and it is really a very serious misnomer,—though the vagueness of our psychological terminology seems to allow it—to do, as *e.g.* Mr. Spencer does—represent the development of self-consciousness as a "differentiation of subject and object". It is, if anything, a differentiation of object and object, *i.e.*, in plainer words, it is a differentiation among presentations. When Mr. Spencer says:—"I am startled from my reverie by the discordant brayings of a three-boy band" and "perceive . . . that the sound broke across my train of thought," &c., &c., he does not mean to imply that the unseemly noise is any more an object in consciousness than "the train of thought," which began with a drain-pipe and ended with death from fever, or rather was ended by this flourish of trumpets which extruded it. He calls them both states of consciousness, and psychologically regarded neither can be more than this. Not only so, but Mr. Spencer admits that "states of consciousness" imply an Ego or Self or Subject of consciousness, and concludes therefore with "a mystery . . . the consciousness of something which is yet out of consciousness" —a mystery or rather, contradiction, which he finds himself "obliged to think"! A singular obligation certainly; it reminds one of the dervish who had to get into a sack and carry himself off. Well may Dr. Bain express his "misgivings as to any process of reasoning that contains in it this obligation".[1] Quite apart from self-consciousness then, wherever there is psychical life or consciousness at all, there are facts the whole of which cannot *in the same sense* be represented as feelings, phenomena, presentations, or states of consciousness.

The last statement brings us to our third alternative, which like the first, may be expressed in the words of J. S.

[1] *Emotions and Will*, 3rd ed., "Consciousness," p. 584.

Mill, *viz.*, "the alternative of believing that the Mind or Ego, is something different from any series of feelings or possibilities of them". To admit this, of course, is to admit the necessity of distinguishing between Mind or Ego, meaning the unity or continuity of consciousness as a complex of presentations, and Mind or Ego as the subject to whom this complex is presented. In dealing with the body from the ordinary biological standpoint no such necessity arises. But, whereas there the individual organism is spoken of unequivocally, in psychology, on the other hand, the individual mind may mean either *(a)* the series of feelings or mental phenomena above referred to; or *(b)* the subject of these feelings for whom they are phenomena; or *(c)* the subject of these feelings or phenomena + the series of feelings or phenomena themselves, the two being in that relation to each other in which alone the one is subject and the other a series of feelings, phenomena or objects. It is in this last sense that Mind is used in empirical psychology: its exclusive use in the first sense being favoured only by those who shrink from the speculative associations connected with its exclusive use in the second. But psychology is not called upon to transcend the relation of subject to object or, as we may call it, the fact of presentation: ontologically that relation may be one of substance and mode, but psychologically it is certainly not this. On the other hand, the attempt to ignore one term of the relation is hopeless; and equally hopeless, even futile, is the attempt, by means of phrases such as consciousness or the unity of consciousness, to dispense with the recognition of a conscious subject. Had this recognition been always full and explicit, some perhaps of the mistakes of the Scottish or Faculty-psychology might have been prevented. But this brings us to our main business in this paper—the ultimate analysis of mind.

What are we to understand by such ultimate analysis? Is it the exhibition of all the distinguishable facts into which all that can enter into anyone's consciousness can be resolved, and analogous therefore to the chemical resolution of all the varieties of matter into sixty-six elements? Or is it rather the determination of what is always present wherever there is consciousness or psychical life at all, and therefore analogous to the inquiry of the physiologist: what are the invariable characteristics of animal life? In the one case the elements reached might exist apart, just as nitrogen and nickel may; in the other they would coexist and together constitute one concrete "state of consciousness".

There is yet a third view, also suggested by an analogous physiological inquiry, *viz.*, that this consciousness is resolvable into a cycle of events, the several phases of which psychological analysis ascertains. Perfect clearness does not seem to prevail among psychologists on these points. While it is agreed—practically on all hands—that the ultimate facts of mind are cognitions, feelings, and conations, there is no corresponding unanimity either as to the category to which these facts belong or as to how they are related. They are spoken of as processes, products, events, states, modes, affections, and so on: for the most part they are discussed in separation as the "energies" or "functions" of corresponding faculties. At other times we are told that "they are never presented to us separately, but always in conjunction and that it is only by an ideal analysis that they can be discriminated and considered apart".[1] Again feeling and cognition are sometimes represented as antithetical, "in inverse ratio"; sometimes it is said feeling may be absent altogether: by some, will is said to be dependent throughout upon the feelings, by others it is regarded as a veritable *primum movens*. In such a state of matters it is obviously desirable to distinguish two different questions, even though we work towards an answer to both simultaneously, the questions, *viz.*, (1) What do we find invariably present where there is consciousness at all?—the result of such an analysis being to determine the elements, factors or constituents of a concrete state of consciousness or *psychosis*, as it has been termed: (2) Is there any definite cycle or order of succession among these, and how are they related? Having determined these points—more or less in course of so doing—it may become possible to attain to a more exact terminology and to avoid the confusing interchange of such words as faculty, capacity, operation, state, modification, &c.

Keeping as much as may be to the first question, we are at once confronted by a psychological doctrine much in vogue at present, *viz.*, that feeling is the one primordial and invariable mark of consciousness. Every living creature, it is said, feels though it may never do any more: only the higher animals, and these only after a time, learn to discriminate and identify and to act with a purpose. This doctrine, strictly taken, almost amounts to a denial of the threefold classification of the facts of mind; and as might be expected, derives its plausibility partly from the vagueness of psychological terminology; and partly from the intimate con-

[1] Hamilton, *Lects. on Metaphysics*, ii., p. 9.

nexion that undoubtedly exists between feeling and cognition on the one hand and feeling and volition on the other. As to the meaning of the term, it is plain that further definition is requisite for a word that may mean *(a)* a touch, as feeling of roughness; *(b)* an organic sensation, as feeling of hunger; *(c)* an emotion, as feeling of anger; *(d)* feeling proper, as pleasure or pain. But even taking feeling in the last, its strict sense, it has been maintained that all the more complex forms of consciousness are resolvable into, or at least have been developed from, feelings of pleasure and pain. The only proof of such position, since we cannot directly observe the beginnings of conscious life, must consist of considerations such as the following:—So far as we can judge we find feeling everywhere, but as we work downwards from higher to lower forms of life, the possible variety and the definiteness of sense-impressions both steadily diminish. Moreover we can directly observe in our own organic sensations, which seem to come nearest to the whole content of infantile and molluscous experience, an almost entire absence of any assignable *quale*. Finally, in our sense-experience generally, we find the element of feeling at a maximum in the lower senses and the intellectual element at a maximum in the higher. But the so-called intellectual senses are the most used, and use we know blunts feeling and favours intellection, as we see in chemists who sort the most filthy mixtures by smell and taste, without discomfort. If then, feeling predominates more and more as we approach the beginning of consciousness, may we not say that it is the only *sine quâ non* of consciousness? Considerations of this kind, however impressive when exhibited at length,[1] are always liable to be overturned by some apparently unimportant fact which may easily be overlooked. Two lines, *e.g.*, may get nearer and nearer and yet will never meet, if the rate of approach is simply proportional to the distance. A triangle may be diminished indefinitely and yet we cannot infer that it becomes eventually all angles, though the angles get no less and the sides do. Now before we decide that pleasure or pain alone may constitute a complete state of mind, it may be well to inquire: What is the connexion between feelings of pleasure and pain and the two remaining possible constituents of consciousness, as we can observe them now?

Broadly speaking, what we find is (1) that we are aware of a certain change in our sensations, thoughts, or circum-

[1] *Cf.* Horwicz, *Psychologische Analysen*, Iter Theil, Abschn. vi.

stances, (2) that we are pleased or pained with the change, and (3) that we act accordingly. We never find that feeling directly alters—*i.e.*, without the intervention of the action to which it prompts—either our sensations or situation, but that regularly these latter with remarkable promptness and certainty alter it. In a great number of cases then, a connexion holds which we may express thus:—In a given state of consciousness we do not find first a change of feeling, and then a change in our sensations, perceptions, and ideas, but, these changing, change of feeling *follows*. In short, feeling appears frequently to be an effect, which therefore cannot exist without its cause, though in different circumstances the same cause may produce a different amount or even a different state of feeling. This remark applies more obviously to what we may call the receptive phase of consciousness; but if we start from the active or appetitive phase we find in like manner that feeling is certainly not, in such cases as we can clearly observe, the whole of consciousness at any moment. True, that in common speech we talk of liking pleasure and disliking pain, but this is either tautology, equivalent to saying: We are pleased when we are pleased, and pained when we are pained; or else it is an allowable abbreviation and means that we like pleasurable *objects*, and dislike painful *objects*, as when we say, we like feeling warm, and dislike feeling hungry. But feeling warm and feeling hungry are not pure feelings in the strict meaning of feeling: they admit, if not of description, yet at least of identification and distinction as truly as colours and sounds do. Within the limits of our observation, then, we find that feeling accompanies some more or less definite presentation which for the sake of it becomes the object of appetite or aversion; in other words, feeling implies a relation to a pleasurable or painful presentation, that, as cause of feeling, and end of the action to which feeling prompts, is doubly distinguished from it. Thus the very facts that lead us to distinguish feeling from cognition and conation, make against the hypothesis that consciousness can ever be all feeling.

But, as already said, the plausibility of this hypothesis is in good part due to a laxity in the use of terms. Most psychologists before Kant, and our English psychologists even to the present day, speak of pleasure and pain as sensations. But it is plain that pleasure and pain are not simple ideas, as Locke called them, in the sense in which touches and tastes are; that is to say, they are never like these localised or projected, nor elaborated in con-

junction with other sensations and movements into percepts or intuitions of the external. This confusion of feeling with sensations is largely consequent on the use of one word pain for certain organic sensations and for the purely subjective state. But to say nothing of the fact that such pains are always more or less definitely localised—which of itself is so far cognition,—they are also distinguished as shooting, burning, gnawing, &c., &c., all which symptoms indicate a certain objective quality. Accordingly all the more recent psychologists have been driven by one means or another to recognise two "aspects" (Bain), or "properties" (Wundt), in what they call a sensation, the one a "sensible or intellectual" or "qualitative," the other an "affective" or "emotive," aspect or property—the latter being also called the "feeling-tone" (*Gefühlston* or *Betonung*) of the sensation. The term "aspect" is figurative and obviously inaccurate: even to describe pleasure and pain as properties of sensation is a matter open to much question. But the point which at present concerns us is simply that when feeling is said to be the primordial element in consciousness more is usually included under feeling than pure pleasure and pain, *viz.*, some characteristic or quality by which one pleasurable or painful sensation is distinguishable from another. No doubt, as we go downwards in the chain of life the qualitative or objective elements in the so-called sensations become less and less definite, at the same time that physiologically organisms with well-developed sense-organs are succeeded by others without any clearly differentiated organs at all. But there is no ground for supposing even the amoeba itself to be affected in all respects the same whether by changes of temperature or of pressure or by changes in its internal fluids; albeit all of these changes will further or hinder its life and so presumably be in some sort pleasurable or painful. On the whole, then, there are grounds for saying that the endeavour to represent all the various facts of consciousness as evolved out of feeling is due to a hasty striving after simplicity, and has been favoured by the ambiguity of the term feeling itself. If by feeling we mean a certain subjective state varying continuously in intensity and passing from time to time from its positive phase (pleasure) to its negative phase (pain); then this purely pathic state implies an agreeing or disagreeing something which psychologically determines it. If on the other hand we let feeling stand for both this state and the cause of it; then, no doubt, a succession of such "feelings" may make up a consciousness; but

then we are including two of our elementary facts under the name of one of them. The simplest form of psychical life, therefore, involves not only a subject feeling but a subject having qualitatively distinguishable presentations which are the occasion of its feeling.

Dismissing the further consideration of Feeling for the present, let us seek now to ascertain more precisely what it is to have Presentations. It was an important step onwards for psychology when Locke introduced that "new way of ideas" which Stillingfleet found alternately so amusing and so dangerous. By idea Locke tells us he meant true appearances in men's minds, or "whatsoever is the immediate object of perception, thought or understanding"; and it was so far a retrograde step when Hume restricted the term to certain only of these appearances or objects, or rather to these appearances or objects in a certain state, *viz.*, as reproduced ideas or images. And, indeed, the history of psychology seems to show that its most important advances have been made by those who have kept closely to this way of ideas; of this, the establishment of the laws of association and their many fruitful applications, and again the whole Herbartian psychology, may suffice as instances. The truth is that the use of such a term is itself a mark of an important generalisation, one which helps to free us from the mythology and verbiage of the "Faculty-psychologists". All that variety of mental facts we speak of as sensations, perceptions, images, intuitions, concepts, notions, have two characteristics in common:—(1) They admit of being more or less attended to, and (2) can be reproduced and associated together. It is here proposed to use the term Presentation to connote such a mental fact, and as the best English equivalent for what Locke meant by Idea and what Kant and Herbart called a *Vorstellung*.

A presentation has then a twofold relation: first, directly to the subject, and secondly, to other presentations. By the first is meant the fact that the presentation is attended to, that the subject is more or less conscious of it, it is 'in his mind' or presented. As presented to a subject a presentation might with advantage be called an 'object'; or perhaps, a 'psychological object,' to distinguish it from what are called objects apart from presentation, *i.e.*, are conceived as independent of any particular subject. Locke, as we have seen, did so call it: still to avoid possible confusion, it may turn out best to dispense with the frequent use of 'object' in this sense. But on one account, at least, it is desirable not to lose sight altogether of this which is

after all the stricter as well as the older signification of 'object';[1] *viz.*, because it enables us to express definitely, without implicating any ontological theory, what we have so far seen reason to think is the fundamental fact in psychology. Instead of depending mainly on that vague and treacherous word consciousness, which some writers fancy frees them from metempirical bogies; or committing ourselves to the position that ideas are modifications of a certain mental substance and identical with the subject to whom they are presented; we may leave all this on one side, and say that ideas are objects, and the relation of objects to subject—that whereby the one is object and the other subject—is presentation.[2] And it is because only

[1] *Cf.* Hamilton, *Reid*, p. 806.

[2] Of course this is only a question of words, but questions of words are not always unimportant, and in psychology especially a more definite terminology is a great desideratum. Physicists pour scorn upon a man who cannot see the difference between momentum and energy or between force and work, but analogous confusions abound in the language of psychologists. Take for example some of Hamilton's assertions about that "very transparent matter," Consciousness, over which, he tells us, philosophers (*i.e.*, other philosophers, of course) have spread obscurity by their attempts to define it, but which, though undefinable, "we ourselves clearly apprehend". Can a man be said clearly to apprehend a fact of which he makes statements like the following?

It is the one necessary condition of all mental phenomena (*Metaphysics*, i., p. 183).

Among its special conditions are Discernment, Memory, Judgment, Attention, &c. (*Met.*, i., p. 201).

It is an *act* (*Met.*, i., p. 192).

It has *contents:* "The phenomena of Feeling and Conation appear only as they appear in consciousness" (*Met.*, ii., p. 431).

"It is the recognition by the mind or ego of its acts and affections" (*Met.*, i., p. 193).

It "is not to be regarded as aught different from the mental modes or modifications themselves," but is just "these above a certain degree of intensity" (*l.c.*, and *Reid*, p. 932).

"It may be compared to an internal light, by means of which, and which alone, what passes in the mind is rendered visible" (*Met.*, i., p. 183).

"It is not to be viewed as an illuminated place, within which objects coming are presented to . . . observation" (*Reid*, p. 932).

There is an unmistakable contrariety among these statements, and others almost equally conflicting might be added both from Hamilton and other writers. But Consciousness, though perhaps the most protean of psychological terms, is not the only one that is continually flitting from category to category.

objects sustain this relation that they may be spoken of simply as presentations.

On this subjective relation of objects, the relation of presentation, it is not necessary to dwell at length here. We have merely to note that on the side of the subject it implies what, for want of a better word, may be called Attention, extending the denotation of this term so as to include even what we ordinarily call inattention. Attention so used will thus cover part of what is meant by consciousness; so much of it, that is, as answers to being mentally active, active enough at least to "*receive* impressions". Attention on the side of the subject implies intensity on the side of the object: we might indeed almost call intensity the matter of a presentation, without which it is a nonentity.[1] As to the connexion between these two, subjective attention and objective intensity—in that higher form of attention called voluntary, we are aware that concentration of attention increases or its abstraction diminishes the intensity of a presentation in circumstances of a physical and physiological kind, which appear to warrant the assertion that apart from this initial change of attention the intensity of the presentation would have continued uniform. Again, in circumstances when psychologically we are aware of no previous change in the distribution of attention, we find the intensity of a presentation increased or diminished if certain physical concomitants of the presentation (*e.g.*, stimulus, nervous process, &c.) are increased or diminished. Thus, though this is a point we could hardly establish without the aid of psychophysics, we may conclude that under given circumstances, the intensity of a presentation may be altered from two sides; depends, in other words, partly upon what we may perhaps call its objective intensity, and partly on the amount of attention it receives.

But let us now call to mind the second characteristic of objects, their revivability and associability; facts which imply a certain inter-objective relation or action, for which we are sorely in need of an appropriate name. As to their revivability, this is a matter which has always been a great puzzle. A certain idea, m, recurs to us in certain circumstances, so that we may represent the whole as m_2 and we say we recognise it as the identical m that recurred to us formerly, the whole position then being representable as m_1. Here then are two times but only one m: yet we say it is re-pre-

[1] *Cf.* Kant's 'Principle of the Anticipations of Perception':—"In all phenomena the real which is the object of sensation, has intensive magnitude."

sented, implying apparently that it had ceased to be presented, but had not ceased to exist. How are we psychologically to explain a continuity which is not a continuity of presentation? And yet without this continuity, what becomes of the identity of our m? For, without it, m_1 and m_2 are two distinct presentations, the first of which is no more, while the second never was till now. On the other hand, since these two presentations do not exist, the attempt to resolve the identity into a similarity must be unavailing. There seems but one way out of this difficulty,[1] and that is to assume that after all the m was continuously presented, but with a diminished and perhaps ever-diminishing intensity; and, farther, that at its so-called re-presentation its intensity was sufficiently increased to enable it to rise above the 'threshold of consciousness' and become a distinct object of attention. Here, then, let us note, is one kind of continuity among objects to which we seem to be committed in talking of their revival or reproduction. And if we look for a moment at their so-called 'association,' we shall find continuity implied again. For what is the fact, our ignorance of which we cover by this simile? Do objects really stick or fuse together when they are simultaneously presented often enough and at the requisite intensity, as the phrase "adhesion by contiguity" might seem to imply? Or are they bound by hidden links, by which they drag each other on and off the stage of consciousness, in accordance with a psycho-dynamics like Herbart's? It may be that any investigation into the nature of association will be fruitless; but if so, association should be a first principle, and so far admit of statement in a form to remove the need for inquiry. As it is, we cannot help asking how presentations, supposed to be originally distinct and isolated, become eventually linked together. For neither the isolation nor the links are clear. Not the isolation, for we can only conceive two presentations separated by other presentations intervening; nor the links, unless these also are objects, and then the difficulty recurs. It disappears, however, if for contiguity we substitute continuity, and suppose the 'associated' objects to be parts, not isolated wholes. Finally, if we turn to our sense-experience, we find there further evidence in support of this continuity. The increased sensibility acquired by practice can be repre-

[1] It is, of course, useless to have recourse to physiology: a physiological fact cannot serve as an explanation for a psychological fact; it can at most suggest where to look for such explanation, but that when forthcoming must involve only psychological conceptions.

sented as due to a restriction of intensity to a particular object in a continuum over which the intensity was irradiated before. It is quite impossible now to imagine the effects of years of experience removed, and to picture the character of our infantile presentations before our interests had led us habitually to concentrate attention on some, and to ignore others, whose intensity thus diminished as that of the former increased. In place of the many things we can now see and hear, there would then be not merely a confused presentation of the whole field of vision and of a mass of undistinguished sounds, but even the difference between sights and sounds themselves would be without its present distinctness. Thus the further we go back the nearer we approach to a total presentation having the character of one general *continuum* in which differences are latent. There is, then, in psychology, as in biology, what may be called a Principle of Progressive Differentiation or Specialisation; but it is not desirable to attempt further to establish and elucidate this principle here. Enough if we see that this, as well as the facts of reproduction and association, forcibly suggest the conception of a certain objective continuum forming the background or basis to the several relatively distinct presentations that are elaborated out of it—the equivalent, in fact, of that unity and continuity of consciousness which has been supposed to supersede the need for a conscious subject. In this *totum objectivum* we have again a conception peculiar to psychology. From the physical standpoint and in ordinary life we can talk of objects that are isolated and independent and in all respects distinct individuals. The screech of the owl has then nothing to do with the brightness of the moon: sound and light, owl and moon—any one may go and leave no gap in the order of things to which the others belong.[1] But for me they are parts of one whole, not merely because special attention to one diminishes the intensity of the others, but also because as attention passes from one to another it passes over no void, and because the representation of one entails that of the others too.

There is one class of objects of special interest even in a general analysis, *viz.*, movements or motor presentations. These, like sensory presentations, admit of association and reproduction, and seem to attain to such distinctness as

[1] From a philosophical point of view, of course, all things are again connected, and much interest attaches to speculations as to how the discrete Many of the physical sciences is related to the empirical One of psychology and the transcendental One of metaphysics.

they possess in adult human experience by a gradual differentiation out of an original diffused mobility which is little more than emotional expression. Of this, however, more presently. It is primarily to this dependence upon feeling that movements owe their distinctively psychological character; so much so indeed that merely physiological movements, reflexes, convulsions, &c., may be reasonably regarded as sensory presentations—or at all events temporarily left out of consideration. The broad fact we want to seize is, that, whereas sensory presentations enter the field of consciousness *ex abrupto*, motor presentations have, normally, definite and assignable psychical antecedents. We cannot psychologically explain the order in which particular sights and sounds occur; but the movements that follow them, on the other hand, can be adequately explained only by psychology. The twilight that sends the hens to roost sets the fox to prowl, and the lion's roar which gathers the jackals scatters the sheep. Such diversity in the movements, although the sensory presentations are similar, is due, in fact, to what we might call the Principle of Subjective or Hedonic Selection. Out of all the manifold changes of sensory presentation which a given individual experiences, only a few are the occasion of such decided feeling as to become objects of possible appetite (or aversion). But unless the movements which bring about the presentations of these objects admitted of a subjective initiation, we could not with any propriety talk of selection or of appetite and aversion: subjective interest there might be, but gratification and relief could only be waited for, not sought. As it is, by means of movements we are something more than the creatures of circumstance. The representation of what interests us comes to be associated with the representation of such movements as will secure its realisation; so that—although no concentration of attention will secure the requisite intensity to an object of desire present only in idea (albeit very fervid imaginations are sometimes content with this)—we can by what is strangely like a concentration of attention convert the idea of a movement into the fact, and in that way attain the coveted reality.

And this has brought us round naturally to what is perhaps the easiest way of approaching the question: What is a Volition? For concerning this, the third of the accepted psychical elements or states or functions, more even than of the rest, serious divergence of opinion prevails not only as to its nature but, in some cases, even as to its existence. Two questions are often confused, why is a particular action willed, and what happens in the willing. The former con-

cerns the dependence of volition on feeling and needs no further notice at this stage; for though that connexion is held by indeterminists to be in certain cases suspended, such 'free-will,' if it exists, is a new fact and not essential to complete mental life.

In ordinary voluntary movement we have first of all an idea or re-presentation of the movement, and last of all the actual movement itself, a new presentation that may be described as the filling out of the re-presentation, which thereby attains that intensity, distinctness and embodiment we call reality. How does this change come about? The attempt has often been made to explain it by a reference to the more uniform, and apparently simpler, case of reflex action, including under this term what are called sensori-motor and ideo-motor actions. In all these the movement seems the result of a mere transference of intensity from the associated sensation or idea that sets on the movement. But, when by some chance or mischance the same sensory presentation excites two alternative and conflicting motor ideas, a temporary block occurs; and when at length one of these nascent motor changes finally prevails and becomes real, then, it is said, there has occurred the state of mind called volition.[1] But this assumption that sensory and motor ideas are associated before volition, and that the volition begins where automatic or reflex action ends, is due to that inveterate habit of confounding the psychical and the physical, which is the bane of modern psychology. How did these particular sensory and motor presentations ever come to be associated? It is wholly beside the mark to answer that they are "*organically determined* psychical changes". In one respect all psychical changes alike are organically determined; inasmuch as all alike—so far, at least, as we at all know or surmise—have organic concomitants. In another respect no psychical changes are organically determined; inasmuch as physical events and psychical events have no common factors. To say that two presentations are associated, obviously implies that they are two, two which are not only distinguishable but actually so far distinct as to be or to have been separately attended to: if a given sensation and a given movement were "so coherent that the one follows the other instantly," they would not be two, and could not be spoken of as associated or connected. Now the only psychological evidence we have of any such intimate connexion between sensory and motor representations is

[1] *Cf.* Mr. H. Spencer's *Principles of Psychology*, i., 496.

that furnished by our acquired dexterities, *i.e.*, by such movements as Hartley styled secondary-automatic. But then all these have been preceded by volition: as Mr. Spencer says, "the child learning to walk, wills each movement before walking it". Surely then a psychologist should take this as his typical case and prefer to assume that all automatic actions that come within his ken at all are in this sense secondarily automatic, *i.e.*, to say that either in the experience of the individual or of his ancestors volition preceded habit.

But if we are thus compelled by a sound method to regard sensori-motor actions as degraded or mechanical forms of voluntary actions, and not voluntary actions as gradually differentiated out of something physical, we have to ask not what happens when one of two alternative movements is executed, but the more general question, what happens when any movement is made in consequence of feeling. It is obvious that on this view the simplest *definitely purposive* movement must have been preceded by some movement simpler still. For any distinct movement purposely made presupposes the ideal presentation, before the actual realisation, of the movement. But such ideal presentation, being a re-presentation, equally presupposes a previous actual movement, of which it is the so-called mental residuum. There is then, it would seem, but one way left, *viz.*, to regard those movements which are immediately expressive of pleasure or pain as primordial, and to regard the so-called voluntary movements as elaborated out of these. The vague and diffusive character of these primitive emotional manifestations is really a point in favour of this position; for it is evidence of an underlying continuity of motor presentations parallel to that already discussed in connexion with sensory presentations, a continuity which, in each case, becomes differentiated in the course of experience into comparatively distinct and discrete movements and sensations respectively.[1]

But, whereas we can only infer, and that in a very round-

[1] It may be well to call to mind here that Dr. Bain also has regarded emotional expression as a possible commencement of action, but only to reject it in favour of his own peculiar doctrine of "spontaneity"—a doctrine, however, which is open to the objection that it makes movement precede feeling instead of following it; an objection that would be serious even if the arguments advanced to support this hypothesis were as cogent as only Dr. Bain takes them to be. Against the position maintained above he objects that "the emotional wave almost invariably affects a whole group of movements," and therefore does not furnish the "*isolated* promptings that are desiderated in the case of the will" (*Mental and Moral Science*, p. 323). But to make this objection is to let heredity count for nothing. In fact, wherever a variety of isolated movements is physically possible, there

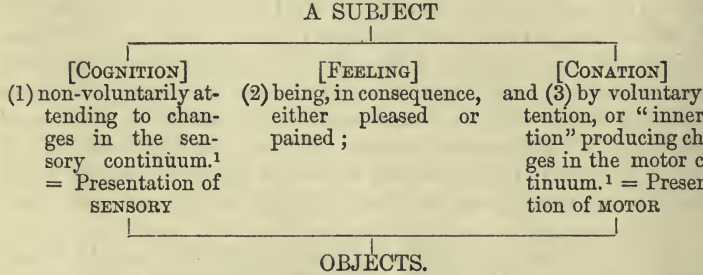
about fashion, that our sensations are not absolutely distinct but are parts of one massive sensation, as it were; we are still liable under the influence of strong emotion directly to experience the corresponding continuity in the case of movement. Such motor-continuum we may suppose is the psychical counterpart of that permanent readiness to act, or rather that continual nascent acting, which among the older physiologists was spoken of as "tonic action," and as this is now known to be intimately dependent on afferent excitations so is our motor consciousness on our sensory. Still, since we cannot imagine the beginning of life but only life begun, the simplest picture we can form of a concrete state of mind is not one in which there are movements before there are any sensations or sensations before there are any movements; but one in which change of sensation is followed by change of movement, the link between the two being a change of feeling.

Having thus simplified the question, we may now ask again:—How is this change of movement brought about? The answer, as already hinted, appears to be: By a change of attention. We learn from such observations as psychologists describe under the head of Fascination, Imitation, Hypnotism, &c., that the mere concentration of attention upon a movement is often enough to bring the movement to pass. But, of course, in such cases there is neither emotional experience nor volition in question; such facts, however, show the connexion between attention and movements. Everybody too has often observed how the execution of any but mechanical movements arrests attention to thoughts or sensations, and *vice versâ*. Let us suppose then that we have at any given moment a certain distribution of attention between sensory and motor presentations: a change in that distribution means a change in the intensity of some or all of these, and change of intensity in motor presentations means change of movement. Such changes are, however, quite minimal in amount so long as the given presentations are not conspicuously agreeable or disagreeable. So soon, however, as this is the case, there is evidence of a most intimate connexion between feeling and attention; but it is hardly possible to exhibit this evidence without first attempting to ascertain what are the characteristics of the presentations or groups of presentations that are respectively pleasurable and painful—an attempt that must for the

also are always found corresponding instincts, "that untaught ability to perform actions," in Dr. Bain's own language, which a minimum of practice suffices to perfect.

present be deferred. In general it may be said that we find pleasure to lead at once to concentration of attention on the pleasurable object, and that in consequence pleasure does not lead at all so certainly to movement as we find pain to do; save of course when movements are themselves the pleasurable objects and are executed, as we say, for their own sakes. In fact, pleasure would seem rather to repress movement, except so far as it is coincident either with a more economic distribution or with a positive augmentation of the available attention; and either of these, on the view supposed, would lead to increased but indefinite (*i.e.*, playful) movement. Pain, on the other hand, is much more closely connected with movement; and movement too, which for obvious reasons much sooner acquires a purposive character. Instead of voluntary concentration of attention upon a painful presentation we find attention to such an object always involuntary; in other words, attention is, as it were, decentralised or withdrawn. If therefore the painful presentation is a movement it is suspended: if it is a sensation, movements are set up, which further distract attention, and some of which may effect the removal of the physical source of the sensation. Such movement, of course, the last of the series of apparent tentatives, is by and by associated with the disturbing sensation, which thenceforth suggests its own remedy, a process which Dr. Bain has excellently described.

We are now at the end of our analysis, and the results may perhaps be most conveniently summarised by first throwing them into a tabular form and then appending a few remarks by way of indicating the main purport of the table. Taking no account of the specific difference between one concrete state of mind and another, and supposing that we are dealing with presentations in their simplest form, *i.e.*, as sensations and movements, we have, then:—


A SUBJECT
[Cognition]
(1) non-voluntarily attending to changes in the sensory continuum.[1] = Presentation of SENSORY
[Feeling]
(2) being, in consequence, either pleased or pained;
[Conation]
and (3) by voluntary attention, or "innervation" producing changes in the motor continuum.[1] = Presentation of MOTOR
OBJECTS.

[1] To cover more complex cases, we might here add the words "or trains of ideas".

Of the three phases, thus logically distinguishable, the first and the third correspond in the main with the receptive and active states or powers of the older psychologists. The second phase, being more difficult to isolate, was, as we know, long overlooked; or, at all events, its essential characteristics were not distinctly marked; it was either confounded with (1), which is its cause; or with (3), its effect. But perhaps the most important of all psychological distinctions is that which traverses both the old bi-partite and the prevailing tri-partite classification, *viz.*, that between the subject, on the one hand, as acting and feeling, and the objects of this activity on the other. Such distinction lurks indeed under such terms as faculty, power, consciousness, but they tend to keep it out of sight. What are here called objects or ideas or presentations are not the products of a sort of creative activity pertaining to the conscious self; but they have laws of their own, in accordance with which indeed their interactions may be modified, and that is all. It was perhaps a wild dream of Herbart's that there could ever be a psychical statics and dynamics, but his attempt may at least serve to exhibit more impressively the large amount of independence there is between the subject of consciousness and its objects. Keeping this distinction in view—instead of crediting the subject with an indefinite number of faculties or capacities, we should naturally seek to explain not only reproduction, association, agreement, difference, &c., but all varieties of thinking and acting by the laws pertaining to ideas or presentations, leaving to the subject only the one power of variously distributing that attention upon which the intensity of a presentation in part depends. Of this single subjective activity, what we call activity in the narrower sense (as *e.g.*, purposive movement and intellection) is but a special case, although a very important one.

According to this view, then, Presentations, Attention, Feeling are not to be regarded as three co-ordinate genera, each a distinguishable state of mind or consciousness, *i.e.*, all alike included under this one supreme category. There is, as Berkeley long ago urged, no resemblance between activity and an idea; nor is it easy to see anything common to pure feeling and an idea, unless it be that both possess intensity. Classification seems, in fact, to be here out of place. Instead, therefore, of the one *summum genus*, state of mind or consciousness with its three co-ordinate subdivisions, cognition, emotion, conation; our analysis seems to lead us to recognise three distinct and irreducible facts, Attention, Feeling and Objects or Presentations as together,

in a certain connexion, constituting one concrete state of mind or *psychosis*. Of such concrete states of mind we may then say there are two forms, more or less distinct, corresponding to the two ways in which attention may be determined and the two classes of objects attended to in each, *viz.*, (1) the Sensory or Receptive State, when attention is non-voluntarily determined, *i.e.*, where feeling follows the act of attention; and (2) the Motor or Active State, where feeling precedes the act of attention, which is thus determined voluntarily.[1]

JAMES WARD.

[1] It must of course be admitted, on this view of mind, that Attention and Feeling are not presentations and therefore are not *directly* known. How then do we come to talk about them? It is impossible to deal with this question here, but I have already tried to answer it in a paper entitled "A General Analysis of Mind," which appeared in the *Journal of Speculative Philosophy*, Oct., 1882; *cf.* pp. 378-381.

II.—IDIOSYNCRASY.

Every man is, in the true Greek sense of the term, an idiosyncrasy. He is a *syncrasis*, because he derives all his attributes, physical or mental, from two parents, or four grandparents, or eight great-grandparents, and so forth. But at the same time he is an *idio-syncrasis*, because that particular mixture is eminently unlikely ever to have occurred before, or ever to occur again, even in his own brothers or sisters. That he is and can be at birth nothing more than such a *crasis*, that he cannot conceivably contain anything more, on the mental side at least, than was contained in his antecedents, is the thesis which this paper sets out to maintain.

Take a thousand red beans and a thousand white beans; shake them all up in a bag together for five minutes, and then pour them out in a square space on a billiard-table just big enough to contain them in a layer one deep. Each time you do so, your product will be the same in general outline and appearance: it will be a quadrangular figure composed of beans, having throughout the same approximate thickness. But it will be a mixture of red beans and white in a certain order; and the chances against the same order occurring twice will be very great indeed. Make the beans ten thousand of each so as to cover the table ten deep, and the chance of getting the same order twice decreases proportionately. Make them a hundred thousand each, and it becomes infinitesimal. You have practically each time not only a *syncrasis* but an *idio-syncrasis* as well.

Now, a human being is the product of innumerable elements, derived directly from two parents, and indirectly from an infinity of earlier ancestors; elements not of two orders only, but of infinite orders; combined together, apparently, not on the principle of both contributing equally to each part, but of a sort of struggle between the two for the mastery in each part. Here, elements derived from the father's side seem to carry the day; there, again, elements derived from the mother's side gain the victory; and yonder, once more, a compromise has been arrived at between the two, so that the offspring in that particular part is a mean of his paternal and maternal antecedents. Under such circumstances, absolute equality of result in any two cases is almost inconceivable. It would imply absolute equality of conditions between myriads of jarring and adverse ele-

ments, such as we never actually find in nature, and such as we can hardly believe possible under any actual concrete circumstances.

The case of twins comes nearer to such exact equality of conditions than any other with which we are acquainted. Here, the varying health and vigour of the two parents or the difference between their respective functional activities at two given times, are reduced to a minimum: and we get in many instances a very close similarity indeed. Yet even among twins, the offspring of the same father and mother, produced at the same moment of time, there are always at least some differences, mental and physical; while the differences are occasionally very great. A competent observer who knew the Siamese twins, informed me that differences of disposition were quite marked in their case, where training and after circumstances could have had little or nothing to do with them, inasmuch as both must have been subjected to all but absolutely identical conditions of life throughout. One was described as taciturn and morose, the other as lively and good-humoured. Whether anything of the same sort has been noticed in the pair of negro girls called the Two-headed Nightingale, I do not know, but to judge from their photographs, there would seem to be some distinct physical diversities in height and feature. We can only account for these diversities in twins generally by supposing that in that intimate intermixture of elements derived from one or other parent, which we have learned from Darwin, Spencer and Galton takes place in every impregnation of an ovum, slightly different results have occurred in one case and in the other. To use Darwin's phraseology, some gemmules of the paternal side have here ousted some gemmules of the maternal side, or *vice versâ;* to use Mr. Spencer's (which to my judgment seems preferable) the polarities of one physiological unit have here carried the day over those of another.

But why under such nearly identical conditions should there be such diversity of result? Let us answer the question by another: Why, with a thousand red and a thousand white balls, shaken together with an equal energy by a machine (if you will), and poured out on our billiard table, should there be a similar diversity? The fact is, you cannot get absolute identity of conditions in any two cases. Imagine yourself mixing two fluids together with a spoon, as regularly as you choose; can you possibly make the currents in the two exactly alike twice running? And here in the case of humanity you have not to deal with simple red beans or

with simple fluids, but with very complex gemmules or very complex physiological units.

If even in twins we cannot expect perfect similarity, still less can we expect it in mere ordinary brothers and sisters. Here, innumerable minor physiological conditions of either parent may affect the result in infinite ways. Not, indeed, that there is any sufficient reason for supposing passing states of health and so forth directly to impress themselves upon the heredity of the offspring; but one can readily understand that in a process which is essentially a mixture of elements, small varieties of external circumstances may vastly alter the nature of the result. Shake the bag of beans once, and you get one arrangement; shake it once more, and you get another and very different one. To this extent, and to this extent only as it seems to me, chance in the true sense enters into the composition of an individuality. The possible elements which may go to make up the mental constitution of any person are (as I shall try to show), strictly limited to all those elements, actual or latent, which exist in the two persons of his parents; but the particular mixture of those elements which will come out in him—the number to be selected and the number to be rejected out of all the possible combinations—will depend upon that minute interaction of small physical causes, working unseen, which we properly designate by the convenient name of chance. In this sense, it is not a chance that William Jones, the son of two English parents, is born an Englishman in physique and mental peculiarities, rather than a Chinese or a negro; nor is it a chance that he is born essentially a compound of his ancestors on the Jones side and on the Brown side; but it is a chance that he is born a boy rather than a girl; and it is a chance that he is born himself rather than his brother John or his brother Thomas. If we knew all, we could point out exactly why this result and not any other result occurred just there and then; but as we do not know all, we fairly say that the result is in so far a chance one. And even if we knew all, we should still be justified in using the same language, for it marks a real difference in causation. William Jones is an Englishman and a Jones-Brown strictly in virtue of his being the son of Henry Jones and Mary Brown; but so are all his brothers and (*mutatis mutandis*) his sisters too. He is himself, and not one of his brothers or his sisters, in virtue of certain minute molecular arrangements, occurring between certain elements for the most part essentially identical with the elements which went to make up the other members of his family. To be metaphorical

once more, one may say that a Robinson differs from a Jones because he is a mixture of brown peas and white peas; whereas one Jones differs from another in being a particular mixture of red beans and black beans, differently arranged in each case.

Next after the similarity between brothers and sisters or other blood-relations we may expect to find the similarity between the offspring of the same class in the same community, similarly situated: and this the more so in proportion to the average identity of their several lives. For example, one would naturally expect that our own agricultural labourers, all engaged in much the same sort of work and surrounded by much the same sort of objects, would produce by intermarriage very similar children. Still more would this be the case among very homogeneous savages, such as the Eskimo or the South American Indians. And where the identity of pursuits is very great on both sides, and in all individuals, as among the Fuegians, the Veddahs, the Andamanese, we should expect to find a great likeness of physique and character between all the offspring.

Conversely, where marriages take place between persons of different races or very differently situated, we may look for great differences between the offspring, especially when compared with those of marriages between relatively homogeneous persons. Under such circumstances, the children tend more or less, though very irregularly, to present a mean between the two parents. Thus, to take the most obvious instance, the average mulatto is half way as a rule between the negro and the European, physically at least, though for various reasons to be considered hereafter it often happens that he is more than the equal in intelligence of the average white. But even in the same family of mulattoes great differences exist between the children. Some will be darker, others lighter; some will be curlier-headed, others straighter-haired; some will have prognathous faces and depressed noses, others will have more regular features and more prominent noses. So far as my observation goes, too, it does not always happen that the most European physical type has the most European mind: on the contrary, high intelligence often accompanies a very African physique, while English features may be concomitant with a truly negro incapacity for logical reasoning, generalisation, or elementary mathematical ideas. It seems as though in each part there was a struggle for supremacy between the two types: and the one type may apparently carry the day in certain external peculiarities, while the other type carries

the day in the more intimate arrangements of the nervous system. At the same time, I cannot myself doubt that there must be a very intimate connexion between every one of the sense-organs and the brain; and I can hardly believe that prognathism and other like physical peculiarities do not imply various correlated nervous facts of great psychological importance. Though in the resulting compromise between the two diverse heredities, the one seems largely to prevail over the other in certain parts, yet it is difficult to suppose that there is not a minute interrelation between all the parts: and perhaps the significant fact that every mulatto, though darker or lighter, is at least brown, not purely black or purely white, gives us the best key to the true nature of the situation.

So far, I have been tacitly but intentionally taking for granted the very principle which I set out to prove, in order fully to put the reader in possession of the required point of view. The question now arises, where in this series of events is there room for any fresh element to come in? Can any man ever be anything other than what some of his ancestors have been before him? And if not, how is progress or mental improvement possible? That men have as a matter of fact risen from a lower to a higher intellectual position is patent. That some races have outstripped other races is equally clear. And that some individual men have surpassed their fellows of the same race and time is also obvious. How are we to account for these facts without admitting that new elements do at sundry times creep in by chance, in the false and unphilosophical sense of the word? How can we get advance unless we admit that exceptional children may be born from time to time with brains of exceptional functional value, wholly uncaused by antecedents in any way?

The answer to this question is really one of the most important in the whole history of mankind. For on the solution of the apparent paradox thus propounded depend two or three most fundamental questions. It is by this means alone that we can account, first, for the existence of great races like the Greeks or the Jews. It is by this means alone that we can account, secondly, for genius in individuals. And it is by this means alone that we can account, thirdly, for the possibility of general progress in the race. It is surprising, therefore, that the question has so little engaged the attention of evolutionary psychologists at the present day.

There are only two conceivable ways in which any incre-

ment of brain-power can ever have arisen in any individual. The one is the Darwinian way, by "spontaneous variation" —that is to say, by variations due to minute physical circumstances affecting the individual in the germ. The other is the Spencerian way, by functional increment—that is to say, by the effect of increased use and constant exposure to varying circumstances during conscious life. I venture to think that the first way, if we look it clearly in the face, will be seen to be practically unthinkable: and that we have therefore no alternative but to accept the second. Deeply as I feel the general importance of Darwin's theory of "spontaneous variation" (using the words in the sense in which he always used them), it seems to me that that theory cannot properly be applied to the genesis of a nervous system, or of any part of a nervous system, and that in this case we must rather come back to the genesis worked out by Mr. Herbert Spencer in the part of his *Principles of Psychology* entitled "Physical Synthesis".

For let us for a moment try to imagine a nervous system being produced, or increased in value, by natural selection of spontaneous variations alone, without the aid of functional variations at all. It is easy to see that an animal or a plant may vary indefinitely here or there in colour, or in hardness of skin, or in woodiness of tissues, and so forth; and it is easy to see that among these truly "accidental" variations[1] some may be better adapted to their particular environment than others. But can we imagine, say, an eye to be produced by a series of such individual accidents? I do not say a human eye, but a simple pigment-cell, with a nerve given off from it to a ganglion, as in the case of the *Amphioxus?* And if we can imagine this (which I cannot), can we imagine a child being born into the world, gifted, I do not say with innumerable faculties never possessed by his ancestors, but with a single nerve-cell or nerve-fibre more than they possessed? Just let us look at what a palpable absurdity this notion implies.

[1] It is a great pity that to this day one is always obliged to employ this useful term with a caution in the way of quotation marks, in order to avoid a supposed philosophical scholar's-mate from sixth-form critics. "Accidental" in biology means, of course, "produced by causes lying outside the previous vital history of the race": in a word, "individual". Among such accidental variations survival of the fittest preserves a few. But it is annoying that one can never use so transparent a phrase without being informed magisterially by a lofty reviewer that the word accidental is unphilosophical, and that nothing ever happens in nature without a cause.

Here is William Jones's head, containing an average human brain, developed on the same pattern as his father's brain (or as his father's in part and his mother's in part): and here in a particular spot in a particular convolution of it, by a combination of mere physical circumstances, has arisen a totally new and hitherto non-existent nerve-cell. Clearly, this is an acquisition to the race, by way of spontaneous variation. But what is the functional use of this new nerve-cell? What physical circumstance decides whether it is to answer to a new movement in the left little finger, or to a single creative element in the composition of a future fugue? Let us grant a little more: let us suppose the surrounding cells are all concerned in the appreciation of colour, or in the manipulation of numbers. Will the new cell in the first case, answer to a new and hitherto undiscovered colour, or to a further æsthetic pleasure in an existent colour, or to a higher synthesis into which colours enter as elements: or what in the second case will be its mathematical value? Again, what good will it be without a whole network of connecting fibres which will link it to percipient structures in the eye on the one hand, and to all the various higher layers in the stratified hierarchy of colour-thought-elements or number-dealing-elements on the other hand? Granted that one man in a hundred was born with one such new cell in his brain, and (setting aside the question how the cell comes to have any function at all) what are the chances that that cell would be so connected with other cells elsewhere as to make any part of an organised brain? Can we imagine a new cell so imported, connected in rational manners with hundreds of other cells, in any other way than by a miracle? Which is only a different form of saying, can we imagine it at all?

But here again is something more than William Jones's head: here is, let us say, a great poet's, or a great philosopher's, or a great mathematician's head: and here are the upholders of spontaneous variation asking us to believe, not that one cell within it thus spontaneously varied in the right direction, but that a vast number of cells and fibres all varied simultaneously and symmetrically, so as to produce a harmonious and working whole, capable of giving us Othello, or the Evolution Theory, or the Differential Calculus. Why, the thing is clearly impossible: impossible, that is to say, as a result of "accidental" physical causes. We might just conceivably imagine one or two fibres made to connect one or two hitherto unconnected nerve-cells, though even here the probability that the nerve-cells so con-

nected were of heterogeneous orders would be far greater than the probability that they were of homogeneous orders: we could much more readily imagine such connexions resulting in a potentiality for believing that a lobster's tail was a blue hope of raspberry watches than in a potentiality for believing that water was composed of hydrogen and oxygen, or that propositions in A were not convertible. But we certainly cannot imagine a whole network of such fibres to spring up by spontaneous variation in a human brain, and yet to produce an organised result. If spontaneous variation ever works in this way, its product must surely be either an idiot or a raving madman. To believe the opposite is too much like believing in Mr. Crosse's electrical *Acari*, which were developed *de novo*, out of inorganic material, in a dirty galvanic battery, and yet possessed all the limbs and organs of degenerate spiders. It is asking us once more to accept a still greater miracle than the first.

But such miracles, it is urged, do take place elsewhere in nature. For example, an almond tree, let us say, once produced a peach-bearing branch by bud-variation. Hence it has been inferred that the peach is a spontaneous variation on the central almond theme. Yet peaches are in colour, fleshiness, sweetness, and perfume, true fruits, adapted to the fruity method of dispersion, by means of attracting birds; whereas the almond is a nut, with the usual nutty peculiarities of green and brown colour, dryness, absence of sweet juice, and so forth. In this case, then, it would seem that bud-variation immediately produced a variety adapted to a different environment in ever so many distinct ways. Well, I have introduced this case just because it illustrates the very impossibility of such a supposition. For it seems pretty clear that if peaches have grown at one act from almonds, then this must really be a case of reversion; the almond must itself be a dried-up form of a still earlier peach; and this will be equally true even if all the existing peaches can be shown to be descended from nut-like almonds. For the almond is a plum by family; and all the other plums have juicy fruits: while one of them, the apricot, closely approaches the almond-peach group in most of its characters. Seeing, then, that the almond must almost certainly be descended from juicy fruit-bearing ancestors, nothing is more natural than that under altered circumstances it should revert, *per saltum*, to a juicy peach. But to suppose that the peach type was originally developed *per saltum* from an almond is to suppose that it

varied at once in several separate ways, all equally and correlatively adapted to a particular mode of dispersion. It is to suppose that accident could do in a minute what we have every reason to believe can only be done by infinitesimal variations and infinite selection.

But if the naturalist cannot imagine the production of a peach *de novo* out of an almond at a single jump, how can he imagine the production of a new thinking element in a human brain? How can he suppose that the accidental introduction of one more little bit of matter into that vast organised labyrinth,—a mighty maze but not without a very definite and regular plan—can have any kind of intelligible relation to the complicated system of cross-connexions and super-imposed directive departments which make it up? And if it be objected that the view taken above of the constitution of the brain is wooden and mechanical, I would answer that it is certainly absurdly diagrammatic and inadequate, but that it is so far right in that it insists upon making believers in spontaneous variation try to realise their own unthinkable attitude. As to materialism, surely it is more profoundly materialistic to suppose that mere physical causes, operating on the germ, can determine minute physical and material changes in the brain, which will in turn make the individuality what it is to be, than to suppose that all brains are what they are in virtue of antecedent function. The one creed makes the man depend mainly upon the accidents of molecular physics in a colliding germ-cell and sperm-cell: the other creed makes him depend mainly upon the doings and gains of his ancestors, as modified and altered by himself.

And now let us look at this second creed, in order to see how far it surpasses its rival in comprehensibility, concinnity, and power of explaining all the phenomena. If it be true that all nerve-increment and especially all brain-increment is functionally produced, we can easily understand why each new cell or fibre should stand in its true and due relation to all the rest. It will have been evolved in the course of doing its own work, and it will be necessarily adapted to it because the act of working has brought it into being. There will be no doubt whether the new cell governs the peculiar action of the left little finger in performing that amusing conjuring trick, or is, on the contrary, connected with the perception of orange-red, because the cell was actually differentiated (say out of pre-existing neuroglia, though that is a hypothetical matter of detail) in the very act of performing the trick in question. There will be no

doubt whether the new fibres are related to the arithmetical faculty or to the Sanskrit verbs, because they were actually rendered possible as nervous tracks in the act of learning decimal fractions. It is true, we may admit to the utmost the intense complexity of the existing brain, and the vast number of its elements involved in even the simplest muscular adjustment or the simplest visual perception. Nobody feels the necessity for admitting such complexity more fully than myself. One may allow with M. Ribot that every act of thought must be conceived rather as a vast dynamical tremor, affecting a wide plexus of very diverse nerve-elements, than as a single function in a single cell or fibre. One may acknowledge that what one ought really to picture to oneself (at the present stage of human evolution) is not so much the genesis of a new cell for governing the little finger, or of a new fibre for understanding a fact in decimal fractions, as the habituating an immense series of cells and fibres, perhaps in various parts of the brain, to thrill together in unison on the occurrence of a single cue. But let us thus purify and dematerialise our conception as far as we like, we must nevertheless come back at last to the fact that every gain implies a modification in structure, and that this modification in structure, if it is to have any functional meaning and value whatsoever, must be functionally brought about.

That such functional modifications are for ever taking place in all of us is a matter of common observation, as evidenced by psychological facts. We are always seeing something which adds to our total stock of memories: we are always learning and doing something new. The vast majority of these experiences are similar in kind to those already passed through by our ancestors: they add nothing to the inheritance of the race. To use a familiar phrase in a slightly new and narrower sense, they do not help to build up "forms of thought"; though they leave physical traces on the individual, they do not so far affect the underlying organisation of the brain as to make the development of after-brains somewhat different from previous ones. But there are certain functional activities which do tend so to alter the development of after-brains; certain novel or sustained activities which apparently result in the production of new correlated brain-elements or brain-connexions, hereditarily transmissible as increased potentialities of similar activity in the offspring. If this is not so, then there is no meaning at all in the facts collected by Mr. Galton, or indeed, for the matter of that, in the common facts of

human experience as to hereditary transmission of faculties for acquired pursuits of any sort. If the children of acrobats make the best tumblers, if the descendants of musical families make the best singers and composers, if a great thinker or a great painter is usually produced by the convergence of two lines of thinkers or artists, then the general truth of this principle is abundantly clear.

Supposing such small functionally-produced modifications to be always taking place, it will be obvious that they must take place most in the most differentiated societies, and least in the least differentiated. A race of hunting savages will perform a certain number of routine acts, which will be for the most part the same for all members of the tribe, and will remain pretty much the same from generation to generation. In the particular direction of hunting and fishing, the cleverness at last attained will be very remarkable; but in most other directions, there will be little excellence and still less variety. On the other hand, in a tribe which is also made a trading and navigating one by the accident of a maritime position, a new set of activities will be specially cultivated, and will give rise to new functional modifications in a different direction. Suppose some of the tribe, in this latter case, to be mainly inland cultivators and hunters, while others of the tribe are mainly sea-board traders or pirates, then each of these sections will tend to develop certain special hereditary brain-modifications of its own. But if a man of the inland section marries a woman of the maritime section, or *vice versâ*, then the offspring will tend to reproduce more or less the structural peculiarities of both parents. And here comes in an important corollary. For though, under such circumstances, the children may none of them fully reproduce all the brain-gains of their father's line, nor all the brain-gains of their mother's line, they will yet on the average reproduce a fair share of the former and a fair share of the latter. Accordingly, they will usually turn out, on the whole, persons of higher general brain-power than either ancestral series; they will partially unite the strong points of both.

It seems to me that this principle is one of very great importance. From it we can deduce the conclusion that in any complex society many children represent directly a convergence of two unlike lines of descent, and indirectly a convergence of innumerable unlike lines, with corresponding gain to the species. Two parents, possessing distinct points of advantage of their own, produce children, some of whom

resemble rather the one, and some the other; but many of whom will at least tend to resemble both in their stronger points. Of course one must allow much for the *idiosyncrasis* as well as for the *crasis*. This child may fall below both its parents in most things; that child may reproduce the weakest elements of both; yonder other child may attain the average or may surpass them in everything. But on the whole, the principle of convergence seems to imply that in a fairly complex society there will always be an average of mental improvement from generation to generation, due to the constant intercrossing of brains specially improved in particular directions. This improvement will, it need hardly be said, be increased and favoured by natural selection; but it will itself form the basis of favourable variations without which natural selection can do nothing. It seems to me easy to understand how survival of the fittest may result in progress, starting from such functionally-produced gains: but impossible to understand how it could result in progress if it had to start from mere accidental structural increments due to spontaneous variation alone.

Thus it becomes clear why certain countries have by mere geographical position necessarily produced certain high types of human intelligence, while in certain other countries the race has never progressed beyond a very low level. There are places like Central Africa, where the physical conditions do not tend to produce any great diversity of occupation; and here the general average of intelligence does not tend to rise high. On the other hand, there are places, like Greece, Italy, the West European peninsulas and islands, where the physical conditions tend to differentiate the population into many groups, agricultural, mercantile, sea-faring, military, naval, professional; and here the general average of intelligence tends to rise very high indeed. Of course, one must allow much influence to the time-element; for every such increase in differentiation involves yet further increases in the sequel, and brings the social organism, or parts of it, into contact with new environments. The Ægæan is not now of the same importance in this respect as during the days when coasting voyages from island to island were the utmost possible stretch of navigation: the science acquired there has widened the sphere of navigation itself first to the entire Mediterranean, then to the open Atlantic, finally to all the oceans of the whole earth. But in principle it has always seemed to me (as against the really accidental view advocated by Mr. Bagehot) that the "philosophy of history,"

the general stream of human development, could be traced throughout to perfectly definite physical causes of this sort. Mr. Bagehot, basing himself on the pure Darwinian theory of spontaneous variations, believed that the differences between races of men were due to mere minute physical sports in their nervous constitution: it appears to me rather that they are due to the action of a definite environment, thus effecting a differentiation of circumstances, and in many cases calling into constant functional activity the highest existing faculties of the various social units in the most diverse ways. We may not thus (though *vide post*) be able to account for the particular character and genius of a Pericles, an Aristotle, a Hannibal, a Cæsar, a Newton, or a Goethe: but we can thus at least account for the general average of intelligence which made Greece, or Carthage, or Rome, or England, or Germany, capable of producing such an individual, as a slight variation on the common type, due to the convergence of separately rich and varied lines of descent. The real illuminating point is this—that such men do arise from time to time among the most intelligent nations, and that they do not arise among the Australian black-fellows, the Digger Indians, or the Andaman Islanders.

And now, how far can we account on these principles for the existence of the individual genius? Well, here we must begin by clearing the ground of a great initial fallacy. Genius, as a rule, has made quite too much of itself. Having had the field all to itself, it has never been tired of drawing a hard and fast line between itself and mere talent. Nevertheless, from the psychological point of view, nothing is plainer than the fact that genius differs from mere talent only by the very slightest excess of natural gifts in a special direction. True, that small amount of superiority makes all the difference in our judgment of the finished work: we say, this is a great poem, while that is a pretty trifle; this is a grand scientific generalisation, while that is a pains-taking piece of laboratory analysis; this is a magnificent work of art, while that is a very creditable little bit of landscape painting. But in the brain and hands of the performer, what infinitely minute structural modifications must underlie these seemingly vast differences of effect! And even in ourselves, the critics, how minute are the shades of feeling which make us give the palm to the one work and withhold it from the other. How many people are really competent to judge in any way of the differences between this poem and that, between

this oratorio and that, between this picture and that? And what is this but to say that the differences are in themselves extremely small and almost elusive?

Now, in a country like Italy, say, where for many ages many men have continually painted pictures of the nymphs and the satyrs, or of the Madonna and of St. Sebastian; where little chapels have studded the land from age to age, with votive tablets to Venus Genitrix or to Our Lady of the Sea; where countless generations of workmen have decorated the walls of Pompeii or covered the vulgarest ceilings of Florence and Genoa with hasty frescoes—in such a country there is developed among all the people a general high average of artistic execution, utterly impossible in a country like Scotland, where there has hardly ever been any indigenous spontaneous art at all to speak of. And when an Italian man of an artistic family, having inherited from his ancestors certain relatively high artistic endowments, marries an Italian woman of another artistic family, similarly, but perhaps somewhat differently endowed, there is at least a possibility, not to say a probability, that their children, or some or one of them, will develop great artistic power. True, we cannot follow the minute working of the *crasis*: we cannot say why Paolo is an artist of the highest type, while Luigi is merely a fair colourist, and Gianbattista is a respectable copyist of the old masters. But at least we can say that all three are painters after a fashion, in virtue of their common artistic descent; and that Paolo is a great painter because he unites in himself, more than either of the others, the respective merits of the two ancestral lines. After all, we common mortals, if we practised all our lifetime, could not turn out as good a sketch as Gianbattista's first water-colour.

In the same way, in a Greece where every god had his temple, every temple its statue, every house its shrine, and every shrine its little deities—in a Greece where marble was what brick is in London, and where artistic stone-cutters were as common as carpenters here—we can understand why a Pheidias was a possible product, and why a Pheidias-admiring public was a foregone conclusion. So, too, we can understand why among ourselves so many artists should come from the only real native schools of decorative handicraft—the workshops of Birmingham, Manchester, and London. We can see why musical talent should arise most in Germany and Italy, or among the Jews, or in our own case among the Welsh and in the cathedral towns. We can see why a Watt is not born in the Tyrol; why a

Stephenson does not come from Dolgelley; why America produces more Edisons, and Bells, and Morses, and Fultons than she produces Schillers, or Mozarts, or Michael Angelos. The convergences which go to produce a great mechanician are more frequent in countries where mechanics are much practised than they are in the western Hebrides or in the British West Indies. The Quakers do not turn out many great generals, and the Kings of Dahomey are not likely to beget distinguished philanthropists.

Of course, there are some hard cases to understand—hard for the most part, I believe, because we do not know enough about the various convergent lines which have gone to produce the particular phenomenon. Here and there, a great man seems to spring suddenly and unexpectedly from the dead level of absolute mediocrity. But then, we do not know how much mediocrity in different lines may have gone to make up his complex individuality: and we do not know how much of what seems mediocrity may really have been fairly high talent. So many men are never discovered. Let me take a few slight examples from our own time, which may help to illustrate the slightness of the chances that make all the difference in our superficial judgments: and if I take them from very recent cases, I think the readers of MIND will not misunderstand my object; for it is almost impossible to recover the facts from remoter periods.

Carlyle, in spite of his spleen, was no bad judge of intelligence: and Carlyle thought Erasmus Darwin, the younger, an abler man than his brother Charles, the author of *The Origin of Species*. Probably nobody else would agree with Carlyle: people seldom do: but at any rate it is clear that Erasmus Darwin must have been a man very high above the average in intellect, doubtless inheriting the same general tendencies which are inherent in the whole of that distinguished family. Yet if it had not been for his brother, probably the world at large would never have heard of him. Again, supposing he had had no brother, but had married and had children, all of whom achieved celebrity, we might have enquired in vain whence these children came by their ability. Once more, take Charles Darwin himself. He was nearly if not quite fifty before he published *The Origin of Species*. It was a mere chance that with his feeble health he lived on to complete that great work. Suppose he had died at forty, how would he have been remembered? Chiefly as the author of a clever book of scientific travels, and of a monograph on the fossil acorn-barnacles. In a

world of such mere accidents as these, who shall say that an apparently negative instance proves anything?

Take another and somewhat different case—the Tennyson family. Here we have three brothers, all with more or less poetical temperament, and all marked by much the same minute peculiarities in cast of thought and turn of expression. Only two, however, I believe, have published or at least have acknowledged their verses; and of these two alone—Alfred Tennyson and Charles Tennyson Turner,—has one a right to speak publicly. When the *Poems by Two Brothers* appeared, who could have said which of the two was destined to turn out a great poet? And in the after event, who can say what little difference of circumstances may have made the one into a clergyman and the other into a professional versifier? If Charles Turner had cultivated his muse as assiduously as the Laureate, would he have produced equal results? What little twist set the one, with Tennysonian love of form carried to the length of a passion, upon the writing of exquisite sonnets alone; while it set the other upon *In Memoriam*, and *Maud*, and *The Princess*, and the *Morte d' Arthur?* What little extra encouragement on the part of a reviewer may have impelled the more successful poet to fresh efforts; what professional distractions or religious scruples may have held back the less illustrious parson? And yet, who can read Charles Tennyson Turner's sonnets without feeling that though the *idiosyncrasis* is not exactly the same, the *crasis* itself is at bottom identical? Compare the sonnets with the work of any one among the imitators,—the men who "all can raise the flower now, for all have got the seed,"—and what a difference! The imitator is all servile copyism in form, with no real underlying identity of matter: the brother is only half a Tennyson in mere externals, but is still own brother in the most intimate turns of thought and feeling.

After such cases as these, do we need any explanation of the sudden apparition of a Carlyle, a Burns, a Shakespeare, a Dickens, from out the ranks of the people themselves? To me, it seems not. Is there not pithiness and sternness and ability enough in the Lowland peasantry to account for the occasional production, out of thousands of casts at the dice, of such a convergence as that which gave us the old man at Ecclefechan who "had sic names for things and bodies," and his two able sons, of whom the more strangely compounded was Thomas Carlyle? Is there not in another type of Scotch peasant enough of pathos and literary power and *bonhomie* to account for an occasional convergence which

will give us either the old popular-song-writers, or Burns himself, or on a slightly lower level such a woman as Janet Hamilton? Again, the case of Dickens looks at first sight somewhat more difficult; but then one may remember that, as far as general mental power went, Dickens was nowhere. He was a pure artist in a special and very restricted line; he possessed a peculiar faculty for describing queer and original people in a queer and original way. Doubtless this faculty was in him so fully developed that it rose to the rank of genius in its own line; but the line was by no means an exalted one. In such a case, who can say what quaint little combinations of ordinary elements went to make up the power that amused and delighted us so much? Are there not thousands of people in our midst who possess just the same faculty in a less degree; people who, without depth or brilliancy in other respects, can raise a laugh by their clever caricatures of the habits and conversation of their friends? Throw in the merest side-twist of comical exaggeration and a grain of plot-forming capacity into such a *raconteur*, and you get the framework for the genius of Dickens. Of genius of that sort, indeed, more than of any other, one may fairly say that it differs only by a hair's breadth from humorous mediocrity. It is otherwise, I believe, with really deep philosophical or scientific power. Grasp, insight, luminousness, breadth; the capacity for dealing with the abstract ideas of mathematics, of logic, of metaphysics; the power of seeing or formulating great generalisations—these things, if I read the lives of thinkers aright, come only from a convergence of able and powerful stocks. It takes three generations, they say, to make a gentleman: surely it takes many generations of trained intelligence on both sides to make a philosopher.

At the same time, it must be remembered that a convergence even of two mediocre strains may produce comparatively high results, provided the endowments of the two strains be complementary or supplementary to one another. To this cause may perhaps be attributed the general high level of intelligence displayed by half-breeds—even half-breeds with a lower race. I have already alluded to the intellectual superiority of mulattoes, a large proportion of whom appear to me (and to some other observers) considerably above the average of either Europeans or negroes. And this is not surprising when we recollect that the negro brain, though relatively inferior, must almost necessarily be highly cultivated in some particular directions, where the European brain is comparatively deficient. If, then, a

mulatto child inherits in fair degrees the quick perceptive faculties and intuitions of his mother and the higher reasoning faculties and forethought of his father, he is likely on the average to be better equipped in inherited potentialities than either.[1] Similarly, one may take it for granted that each great European nationality has some strong points not equally shared in by the others; and it is a trite observation that intermarriages between members of such nationalities tend to produce an unusually high level of general intelligence. In Ireland, the mixed French families, sprung from intermarriages with refugees, have long been noticed in this respect; at Norwich and throughout the Eastern counties, the mixed descendants of the Huguenots (such as the Martineaus and others) have been equally distinguished. Perhaps one might even point out an exceptional amount of intellectual power in the more mixed Celtic and Teutonic regions of Britain—the borderlands of the two races—notably at Aberdeen and in Devonshire. But the most remarkable and least dubious instance is that of the mixed offspring of Jews and Christians. Here we start with a pure race of unusual intellectual vigour and power, the Jews, long thrown by circumstances into an environment which has brought out many of their faculties in a very high degree. They are the oldest civilised race now remaining on the earth; they are artistic, musical, literary, exceptionally philosophic, and hereditarily cultivated. Even by marriage among themselves they naturally produce a very large proportion of remarkable men. But when they marry out with Christian women—in other words, with women of the European race—the special Aryan traits seem to blend with the Semitic in a very notable and powerful mixture. I have not space to give illustrations, but the list that can be compiled of distinguished persons of

[1] Darwin has somewhere noted that half-breeds with lower races appear to be on the whole often morally inferior to either parent race; and he has suggested that this inferiority may be due to reversion to an earlier and still more savage type of humanity. Without expressing any opinion on the question of fact (a delicate one to decide), I fancy another explanation fits more simply: namely, that as morals are a comparatively recent and unstable acquisition even in the best and highest, they do not crop up in the half-breed; and the union of relatively high European intelligence with relatively low savage ethics may easily produce what seems at least to be a very brutal and diabolical nature. Surely there can be nothing worse in any savage than such abnormal products of our own civilization as Peace the murderer, or as the man Thomasson who attempted to blow up an Atlantic steamer by a piece of dynamite clockwork for the sake of obtaining the insurance.

half-Jewish blood is something simply extraordinary, especially when one remembers the comparatively small sum-total of such intermarriages. Indeed, the difficulty would probably be to find a single person of mixed Jewish race who was not at least above the average in intellect and in plasticity of thought.

Finally, it seems to me that unless we accept the view here contended for, that all increments of brain-power are functionally produced, the whole history of human development ought to present the appearance of a continuous chaos. Granted this principle, we can understand why a Pheidias appeared in Greece, a Raffaelle in Italy, a Watt in Britain; without it, we cannot understand why they should not all have appeared in Iceland or in New Guinea just as well. If mere physical circumstances affecting germs and sperm-cells can produce miraculous and really uncaused new developments of structure and function—can make a genius spring from nobodies, and a philosopher grow at one leap out of two common strains, of the earth, earthy—then we can see no reason why there should not be great families, great epochs, great outbursts in any one place as well as another. But if all increments are functionally acquired, then we can understand why this environment produces races of sculptors, that environment races of poets, yonder environment races of traders, or thinkers, or soldiers, or mechanicians. The first hypothesis is one that throws no light at all upon any of the facts; the second hypothesis is one that explains them all with transparent lucidity.

GRANT ALLEN.

III.—MR. HERBERT SPENCER'S THEORY OF SOCIETY.

II. THE LAW OF EQUAL LIBERTY.

In the last number of MIND I ventured to question whether the law of equal liberty which Mr. Spencer now some thirty years ago set forth in his *Social Statics* can in any guise or form find place in that "ideal code of conduct formulating the behaviour of the completely-adapted man in the completely-evolved society,"[1] to determine the contents of which is the task of Absolute Ethics. It remains to consider this law as a rule prescribing the behaviour of men who are not yet perfect, for "when, formulating normal conduct in an ideal society, we have reached a science of absolute ethics, we have simultaneously reached a science which, when used to interpret the phenomena of real societies in their transitional states, full of the miseries due to non-adaptation (which we may call pathological states), enables us to form approximately true conclusions respecting the natures of the abnormalities, and the causes which tend most in the direction of the normal".[2] Now in *Social Statics* the law in question, the "First Principle," was thus stated—"*Every man has freedom to do all that he wills, provided he infringes not the equal freedom of any other man.*"[3] Mr. Spencer did not regard this as a complete statement of the whole duty of imperfect man. A man is bound to obey this law and in obeying it he is just; but he ought also to be positively beneficent, negatively beneficent and prudent. The field of positive beneficence grows ever narrower; still in some cases a man ought to sacrifice himself in doing good to others. He ought again to be negatively beneficent, for "various ways exist in which the faculties may be exercised to the aggrieving of other persons without the law of equal freedom being overstepped. A man may behave unamiably, may use harsh language, or annoy by disgusting habits; and whoso thus offends the normal feelings of his fellows, manifestly diminishes happiness."[4] This he ought not to do, for in the last resort happiness is the chief good. Again there are the self-regarding virtues; one ought to be sober

[1] *Data of Ethics*, § 105. [2] *Ib.*
[3] *Soc. Stat.*, c. 6, § 1. [4] *Soc. Stat.*, c. 4, § 4.

and so forth. But these "supplementary restrictions," imposed by negative beneficence and by prudence, "are of quite inferior authority to the original law. Instead of being, like it, capable of strictly scientific development, they (under existing circumstances) can be unfolded only into superior forms of expediency."

These "supplementary limitations involve the term *happiness*, and as happiness is for the present capable only of a generic and not of a specific definition, they do not admit of scientific development. Though abstractedly correct limitations, and limitations which the ideal man will strictly observe, they cannot be reduced to concrete forms until the ideal man exists."[1] . . . "Indeed we may almost say that the first law is the sole law; for we find that of the several conditions to greatest happiness it is the only one at present capable of a systematic development; and we further find that conformity to it ensures ultimate conformity to the others."[2]

Almost supreme in ethics, it is absolutely supreme in politics. In other words, though the exercise I make of the liberty which this law allows me is not morally indifferent, still it can not be right for any man, prince, potentate or parliament to restrict my freedom within any narrower bounds. Whether we be sovereigns, or whether we be subjects, we must leave every man free to do all that he wills provided that he infringes not the equal liberty of any other man.

Mr. Spencer apparently still holds by this law. It is true that in the *Data of Ethics* he nowhere states it in such plain terms as those cited above. However he tells us that the maintenance of equitable relations between men (and 'equitable' means 'equal') is "the condition to the attainment of greatest happiness in all societies; however much the greatest happiness attainable may differ in nature, or amount, or both," and that "this pre-requisite to social equilibrium," "this universal requirement," was what he had in view when he chose for his first work the title *Social Statics*.[3] He has also, at least as lately as 1868, told us that he "adheres to the leading principles set forth" in that book, though not "prepared to abide by all the detailed applications of them," and further that "the deductions included in Part II." (the Part which contains that deduction of proprietary rights which forms the main subject of this paper) "may be taken as representing in great measure those which the author would still draw; but had he now to express them he would express some of them

[1] *Soc. Stat.*, § 5. [2] *Ib.*, § 6. [3] *Data*, § 61.

differently."[1] We have reason therefore for believing that Mr. Spencer adheres to the "First Principle" (which must be among the leading principles) of *Social Statics*, and that he is still ready to deduce from it proprietary rights in somewhat the same fashion in which he set about that task in his earliest work. Nor is this all, for in his very last work, the *Political Institutions*, he recurs to the distinction which he took in 1850 between property in land and property in other things, with the result of finding a new justification for one of the most marked peculiarities of the treatment which property received in *Social Statics*. It seems therefore fair to infer that the doctrine here to be criticised is in the main Mr. Spencer's present doctrine; but in any case the fact that it once was his is a sufficient claim to respectful attention, though, should the law of equal liberty disappear from any Deuteronomy that may yet be forthcoming, this would certainly remove a difficulty from the way of some who would much rather agree than disagree with Mr. Spencer.

Now some of the applications which in *Social Statics* were made of this first principle were, so far as I am aware, quite new, and certainly they were very striking. But the principle itself was not new, for it had been stated and adopted by no less a person than Kant. It seems to me probable, if such a guess may be allowed, that in 1850 Mr. Spencer was not aware of this, for on the several occasions on which he has argued that his law is a precise expression of that idea of Justice or Equity which is more or less clearly apprehended by others, he has cited authorities very much less to the point than Kant's political or juristic writings. The dogma of equal liberty is not at all an unnatural outcome of a theory of Natural Law, or (as, to prevent all ambiguity, we may say) of Natural Right. From of old it stood written that all men are by nature free, and that all men are by nature equal, and when it had at length become plain that men clamouring for natural liberty and natural equality were not to be put off with stories about an original contract, to say that all men ought to be equally free must have seemed an obvious mode of reconciling the possibly conflicting claims of these two ideals of Natural Right. It may well be, therefore, that some exponent of *Jus Naturæ*, some natural lawyer had already hit on Mr. Spencer's first principle before it was stated by Kant. At any rate, however, it was stated by

[1] Preface to American edition of 1864, and Preface to English edition of 1868.

Kant, and that very plainly. Already in an essay published in 1793 we find this passage:—

"Ein Jeder darf seine Glückseligkeit auf dem Wege suchen welcher ihm selbst gut dünkt, wenn er nur der Freiheit Anderer, einem ähnlichen Zwecke nachzustreben, die mit der Freiheit von Jedermann nach einem möglichen allgemeinen Gesetze zusammen bestehen kann (d. i. diesem Rechte des Andern), nicht Abbruch thut."[1]

Kant contrasts this principle of freedom with the utilitarian doctrine that a ruler should directly aim at making his subjects happy, and this latter, much in Mr. Spencer's manner, he pronounces despotic. Then in the *Rechtslehre* this rule of equal liberty stands forth as the general principle of all law (Recht).

"Das Recht ist also der Inbegriff der Bedingungen, unter denen die Willkühr des Einen mit der Willkühr des Anderen nach einem allgemeinen Gesetze der Freiheit zusammen vereinigt werden kann."

"Eine jede Handlung ist *recht*, die oder nach deren Maxime die Freiheit der Willkühr eines Jeden mit Jedermanns Freiheit nach einem allgemeinen Gesetze zusammen bestehen kann."[2] . . .

"Das angeborne Recht ist nur ein einziges. Freiheit (Unabhängigkeit von eines Anderen nöthigender Willkühr) sofern sie mit jedes Anderen Freiheit nach einem allgemeinen Gesetze zusammen bestehen kann, ist dieses einzige, ursprüngliche, jedem Menschen kraft seiner Menschheit zustehende Recht."[3]

Had the *Rechtslehre* fallen into Mr. Spencer's hands ere he wrote *Social Statics*, he might have had the satisfaction of appealing to a high philosophical authority in support of his first principle, but had he watched Kant's struggles to get out of this formula a coherent system of Natural Right, his satisfaction would probably have been alloyed with some misgivings as to the hopefulness of an undertaking which cost his great predecessor many a curious contortion. Coleridge knew well this law of equal liberty. In *The Friend*[4] he says that all the different systems of political justice, all the theories of the rightful origin of government are reducible in the end to three classes, correspondent to the three different points of view in which the human being itself may be contemplated. That being may be regarded as an animal, and we fall into Hobbism; or as endowed with understanding, and utilitarianism follows; or as rational, and we must have politics of the pure reason, or "metapolitics". Coleridge professing himself an advocate of the second system (he was

[1] *Ueber den Gemeinspruch: Das mag in Theorie richtig sein, etc.* (Kant's *Werke*, ed. Hartenstein, vol. vi., pp. 322-3).

[2] Ed. cit, vol. vii., p. 27. [3] *Ib.*, p. 34.

[4] *The Friend*, First Section:—"On the Principles of Political Knowledge" (ed. 1863, vol. i., pp. 179 ff.).

utilitarian in politics though not in ethics), gives a sketch of the metapolitical system, and in doing so expressly identifies it with the French revolutionary philosophy; but as it seems to me, the theory which he states in order to refute is really an eclectic mosaic of theories part English, part French, part German. But whether or no this sketch fairly represents the opinions which had been held by any one theorist, Coleridge in the following passage not indistinctly foreshadows the main doctrine of *Social Statics*.

"Justice, austere, unrelenting justice is everywhere holden up as the one thing needful; and the only duty of the citizen, in fulfilling which he obeys all the laws, is not to encroach on another's sphere of action. The greatest possible happiness of a people is not, according to this system, the object of a governor; but to preserve the freedom of all, by coercing within the requisite bounds the freedom of each. Whatever a government does more than this, comes of evil: and its best employment is the repeal of laws and regulations, not the establishment of them. Each man is the best judge of his own happiness, and to himself must it therefore be entrusted. Remove all the interferences of positive statutes, all monopoly, all bounties, all prohibitions, and all encouragements of importation and exportation, of particular growth and particular manufactures; let the revenues of the state be taken at once from the produce of the soil; and all things will find their level, all irregularities will correct each other, and an indestructible cycle of harmonious motions take place in the moral equally as in the natural world. The business of the governor is to watch incessantly, that the state shall remain composed of individuals, acting as individuals, by which alone the freedom of all can be secured."[1]

Now Coleridge, certainly not biased against the claims of pure reason, rejected the law of equal liberty because, as he thought, it must condemn property. "It is impossible," he says, "to deduce the right of property from pure reason."[2] To this he appends a characteristic foot-note, "I mean practically and with the inequalities inseparable from the actual existence of property. Abstractedly, the right to property is deducible from the free agency of man. If to act freely be a right, a sphere of action must be so too." We may doubt whether a kind of property, the *esse* of which is *abstrahi*, can be of much value to its owner, but probably Coleridge has his eye on Kant and means that between proprietary rights and the law of equal liberty there is no formal, though there is of necessity a practical contradiction. Kant, as it seems to me, had evaded rather than solved the problem by introducing alongside of his "Allgemeines Princip des Rechts," a "Rechtliches Postulat der praktischen Vernunft". Every external object of desire must, he argues, be capable of appropriation. In order that it may be used, it must be appropriated, and it would be absurd to say that anything

[1] First Section, Essay 4 (vol. i., pp. 219-220). [2] *Ib.* 222.

useful can not rightfully be used. The easy reply is that doubtless this is so, that a political theory which condemns to eternal uselessness things that are useful condemns itself as worse than useless; but this does not prove that an admission of this postulate of practical reason is not an infringement of the inborn right of every man to have equal liberty with each of his neighbours. Kant, as I understand him, thought it enough to say that there is no formal contradiction between his postulate and his principle. Certainly there is none, for neither formal logic nor any principles which Kant could discover *a priori* can prove that we are not living in a world wherein it is possible for each of us to satisfy his every wish and yet leave unappropriated as many objects of desire as his fellows can possibly want. Such will perhaps be our condition when we are fully-adapted men in a fully-evolved society, but we happen to know substantially, if not formally, that such is not our present condition and that were it our condition the idea of property, of exclusive right, would be absurd. Who, asks Coleridge, ever thought of property in heaven, property among angels and glorified spirits, beings of pure reason? And why, asks Hume,[1] raise landmarks between my neighbour's field and mine when my heart has made no division between our interests, but shares all his joys and sorrows with the same force and vivacity as if originally my own? Property means that the world being what it is and men being what they are, every man cannot have all that he wants.

The real problem which has to be faced by any scheme of Natural Jurisprudence which rejects arguments based on mere expediency, is just the old problem which Locke set before him, though the terms in which it has to be stated may be new. God made all men free and equal and gave the earth to them in common; it is required to find a justification for exclusive proprietary rights. It is required to find a justification; the conclusion to which the theorist must come is a foregone conclusion, for, as Locke pointed out in memorable words, proprietary rights there must be if the human race is to exist. Carry our socialism never so far, we must end with appropriation, and appropriation by individuals. When did the acorns become the property of the natural man—"when he digested? or when he eat? or when he boiled? or when he brought them home? or when he picked them up?"[2] At latest they must be his when

[1] *Inquiry concerning the Principles of Morals*, sec. 3, pt. 1.

[2] *Of Civil Government*, § 28.

they are fairly in his stomach. Mr. Spencer knew well how to use this argument against "M. Proudhon and his party," and of course there is a plain absurdity in saying that no appropriation can be just. It does not follow, however, that the law of equal liberty is not committed to this absurdity and merely refrains from declaring that property is theft because the use of a word like *theft*, which commonly imports some blame, might seem to imply that property is at least possibly rightful.

We may now consider how Mr. Spencer, in 1850, sought to avoid this ugly and impotent conclusion. Most certainly he meant to avoid it; every man would so mean, but he more than others, for his practical teaching in politics requires that proprietary rights shall be built on a foundation so sure that they can resist the attacks of any occasional exceptional expediency. He begins, as I venture to think, very logically by making large, but not too large, concessions to the anarchist.

"Given a race of beings having like claims to pursue the objects of their desires—given a world adapted to the gratification of those desires—a world into which such beings are similarly born, and it unavoidably follows that they have equal rights to the use of this world. For if each of them has freedom to do all that he wills, provided he infringes not the equal freedom of any other, then each of them is free to use the earth for the satisfaction of his wants, provided he allows all others the same liberty. And, conversely, it is manifest that no one, or part of them, may use the earth in such a way as to prevent the rest from similarly using it; seeing that to do this is to assume greater freedom than the rest and consequently to break the law. Equity, therefore, does not permit property in land."[1]

This we must allow to be very sound argument, very much more logical than anything in the *Rechtslehre*. By *world*, however, Mr. Spencer must mean the material universe, and when the *world* of the first sentence becomes the *earth* of the second, and the *land* of the fourth, we think that he is but drawing by way of example a particular conclusion from general premises. So with *property*, this word in our ears connotes some large and permanent right, for we are not accustomed to say that the man in the street is proprietor of the spot upon which he is standing. What "Equity" really does not permit is the exclusive possession by one man of any particle of matter which any other men wish to possess, or the exclusive, though but temporary, occupation of any part of space that any other men wish to occupy. There follows a *reductio ad absurdum* of any contrary opinion. "If *one* portion of the earth's surface

[1] *Soc. Stat.*, c. 9., § 1.

may justly become the possession of an individual, and may be held by him for his sole use and benefit, as a thing to which he has an exclusive right, then *other* portions of the earth's surface may be so held, and eventually the *whole* of the earth's surface may be so held." This truth of course holds good of other things besides the earth's surface. If one atom may be owned, all atoms may be owned. "Observe now the dilemma to which this leads. Supposing the entire habitable globe to be so enclosed, it follows that if the landowners have a valid right to its surface, all who are not landowners, have no right at all to its surface. Hence such can exist on the earth by sufferance only. They are all trespassers."[1] Worse is behind if theft be worse than trespass, for should we concede property in one molecule inexorable logic may eventually drive us to concede property in all molecules, and our dilemma will then be theft or suicide.

It is true that Mr. Spencer, for some reason or another, spends most of his indignation on property in land. This however does not prevent him from dealing out, in a later passage, impartial though less rhetorical condemnation against such property in movables as now exists. In the meantime he disposes briefly of the existing titles of landowners. It can never be pretended that they are legitimate. "Should any one think so, let him look in the chronicles. Violence, fraud, the prerogative of force, the claims of superior cunning—these are the sources to which those titles may be traced. The original deeds were written with the sword, rather than with the pen: not lawyers, but soldiers, were the conveyancers: blows were the current coin given in payment; and for seals, blood was used in preference to wax. Could valid claims be thus constituted? Hardly." A title originally bad can not be made good by transfer. Sale or bequest can not generate a right. Nor can lapse of time validate the invalid. Clearly the law of equal liberty can not recognise any particular term of years as sufficient to turn trespass into ownership. Then we are told that "not only have present land-tenures an indefensible origin, but it is impossible to discover any mode in which land *can* become private property". The pleas of title by first occupation, by improvement, by, in Locke's phrase, "mixing one's labour" with the land, are dispelled in a spirited dialogue between a "cosmopolite" and a backwoodsman who has made unto himself a clearing.

[1] *Soc. Stat.*, § 2

"The world is God's bequest to mankind," says the former, all men are joint heirs to it; you amongst the number. And because you have taken up your residence on a certain part of it, and have subdued, cultivated, beautified that part —improved it as you say, you are not therefore warranted in appropriating it as entirely private property."[1]

This is equally true of all things other than land. We may subdue, cultivate, beautify, work up into this form or that form, but matter we can not make, and it belongs to mankind. "The world is God's bequest to mankind; all men are joint heirs to it"; and if no one has a right to take a bit of it, cultivate it, and call it his own, still less can he have a right to carry a bit bodily away in his hands, his pocket, or his stomach and thus consummate a constructive theft by actual asportation. For this conclusion we must wait until the next chapter: but we get it in good time.

"The reasoning used in the last chapter to prove that no amount of labour, bestowed by an individual upon a part of the earth's surface, can nullify the title of society to that part, might be similarly employed to show that no one can, by the mere act of appropriating to himself any wild unclaimed animal or fruit, supersede the joint claims of other men to it. It may be quite true that the labour a man expends in catching or gathering, gives him a better right to the thing caught or gathered, than any one other man; but the question at issue is, whether by labour so expended he has made his right to the thing caught or gathered, greater than the rights of all other men put together."[2]

Besides, his right can only be admitted if after the appropriation there is, in Locke's words, "enough and as good left in common for others". "A condition like this gives birth to such a host of queries, doubts, and limitations, as practically to neutralise the general proposition entirely," and out of this inquisition "it seems impossible to liberate the alleged right without such mutilations as to render it in an ethical point of view entirely valueless".

"Abstractedly," then, as Coleridge said, there may be a right of property, but practically this is entirely valueless. Property might be rightful in certain conceivable or inconceivable circumstances (circumstances, by the way, that would render the notion of property absurd), but these circumstances are not ours. The landowner and the owner of movables are in the same position, and (though Mr. Spencer does not emphasise this conclusion) all existing titles to property of every kind are bad. Indeed in almost all, if not all, cases no title can be made to a movable that does not involve an admission that there may be property in

[1] *Soc. Stat.*, c. 9, § 4. [2] *Ib.*, c. 10, § 1.

land. Whence the title to an apple, a shilling, a coat? Exchange or gift has not generated it; time has not consecrated it. It is null.

The outlook now seems hopeless, and we are beginning to think that Mr. Spencer's "cosmopolite" was really a chaopolite in disguise. But the law of equal liberty having sufficiently proved its power as an engine of impartial destruction, the time for reconstruction has come, and Mr. Spencer has ready for us a scheme which shall give to proprietary rights a legitimate foundation; in theory a very simple scheme, whatever may be the practical difficulties which will impede its accomplishment. He did not recommend what is called "the nationalisation of the land"; that would have helped him but a little way, if any way, towards establishing an equitable system of property. Englishmen can have no better title to England than has Lord A to his deer-forest. We must not exclude Germans or Frenchmen, or the Chinese or the Chinooks from sharing in the rents and profits of our fertile island. The surface of the earth is to be owned by "the public," "the great corporate body—Society," "the community," "mankind at large," and is to be let out upon leases at the best rent. This done, "all men would be equally landlords; all men would be alike free to become tenants". Under this system of land-tenure all difficulties about property in movables disappear "and the right of property obtains a legitimate foundation".[1]

Does it? This is a serious question; for, however far distant may be the time when mankind at large will "resume" the ownership of the soil, even a theoretical deliverance from our apparently incurable immorality would be of some value. Now suppose that the resumption has taken place. All men are equally landlords, but are all men equally free to become tenants? All men, it is true, are "equally free to bid" for a farm, just as all men are even now equally free to bid for whatever lands or goods are in the market. If all that the law of equal liberty requires in the matter of land-tenure is that every man shall be equally free to bid for land that law is perfectly fulfilled in this country at this moment. But existing titles, it may be said, are bad, and men can not at present purchase an "equitable" title. The answer is that this truly unfortunate state of things will not be improved by the resumption. Mr. A will outbid his fellows for a site in the best quarter, for the best farm, the best moor. What will enable him to do so will

[1] *Soc. Stat.*, c. 10, § 2.

be his superior wealth, and his wealth will be then as now illgotten. In whatever it may consist, coin or cotton or what not, it will consist of matter subtracted from the common stock of mankind. Sale or bequest can not turn wrong into right, lapse of time will not legalise what was once unlawful, and the long and short of it is that A or his predecessors in title must have robbed mankind and he is to be left in possession of the stolen goods and even suffered to acquire by means thereof a lease of public land. Our original sin of wrongful appropriation is not thus to be purged away.

An equal division of all wealth, which Mr. Spencer would strenuously resist, seems at first sight a more hopeful project. Once let there be an equitable distribution of all desirable things, then, it might be thought, we could leave the future to the law of equal liberty. But to a similar proposal (restricted however to an equal division of land) Mr. Spencer has given a very noteworthy answer. After urging the difficulty of making a really fair allotment, he asks :—

> "Is it proposed that each man, woman, and child, shall have a section? If so, what becomes of all who are to be born next year? And what will be the fate of those whose fathers sell their estates and squander the proceeds. These portionless ones must constitute a class already described as having no right to a resting-place on earth—as living by the sufferance of their fellow-men—as being practically serfs. And the existence of such a class is wholly at variance with the law of equal freedom."[1]

The same, be it observed, will happen after as before the "resumption" of the land. Portionless ones will be born with no more chance of holding land for years than they now have of owning land absolutely. But it is more important to notice that here Mr. Spencer throws away the last hope of squaring property with the law of equal liberty. Were it not for the claims of children yet unborn we might harden our hearts and say that this law is not retrospective. Let us sanction existing titles, or let us make some fresh distribution of wealth that seems better than the present, then pass a sponge over the past and abide by our law for the future. But "until it can be proved that God has given one charter of privileges to one generation, and another to the next," or to adopt other terms, until it can be proved that men hereafter to be born are not *men* within the meaning of our law, we shall find no answer to Mr. Spencer's question, what is to become of all who are to be born next year? They will come into an appropriated world, appro-

[1] *Soc. Stat.*, chap. 9, § 5.

priated without their consent. Redistribution of wealth on the birth of every child is what our law requires. To find Mr. Spencer sanctioning the claims of those "whose fathers sell their estates and squander the proceeds" may surprise us. His usual doctrine is that the sons of the industrially unfit shall not be heirs with the sons of the fit. If the fathers eat sour grapes we must not hinder the salutary process of evolution which sets the children's teeth on edge. Very possibly this argument about portionless ones may have escaped him unadvisedly in the course of controversy with an imaginary opponent, but it is a sound argument, one sanctioned by the law of equal freedom. If we are to tell the child of penniless parents that he is just as free as the rest of us to acquire property by contract or gift we must make exactly the same remark to Mr. Spencer when he denounces "landlordism".

In short, if we are going to be really serious about our law of equal liberty, and think it capable of a "strictly scientific development," we must prepare some scheme which will equalise the advantages of all children hereafter to be born. Any such scheme would be ridiculous enough and, what is more, would be condemned by Mr. Spencer as worse than ridiculous. There remains but one other course; we may adopt the good old device of a constructive contract to which most of Mr. Spencer's predecessors in the attempt to square property with natural liberty and equality have found themselves sooner or later reduced. But much experience has warned us that if once we take to constructive contracts, we may indeed by the exercise of a little metaphysico-legal legerdemain construct whatever pleases us, but it is easiest and simplest to reconstruct pure Hobbism and then our Law of Nature becomes *Quod principi placuit*.

We have seen that according to *Social Statics* the title which any one can now have to movable goods is "in an ethical point of view entirely valueless". Perhaps on this point Mr. Spencer has changed his mind. In *Political Institutions* he insists on the distinction between property in land and property in other things. The one is still "established by force," but the other is now "established by contract". This is presented to us not as guesswork or declamation, but as the sober result of scientific sociology. That this theory is groundless might, in my opinion, be shown even from the evidence which Mr. Spencer brings for its support, but a discussion of history would here be quite out of place. We are concerned with what has been only in so far as it determines what ought to be, and all Mr.

Spencer's historical generalisations shall therefore be taken as true. We must ask then what inferences he draws from the history of property as to the relations which will exist between men in the ultimate stage of human progress and therefore in that ideal society which it is the business of Absolute Ethics to describe. The answer shall be given in his own words.

"At first sight it seems fairly inferable that the absolute ownership of land by private persons, must be the ultimate state which industrialism brings about. But though industrialism has thus far tended to individualise possession of land, while individualising all other possession, it may be doubted whether the final stage is at present reached. Ownership established by force does not stand on the same footing as ownership established by contract; and though multiplied sales and purchases, treating the two ownerships in the same way, have tacitly assimilated them, the assimilation may eventually be denied. The analogy furnished by assumed rights of possession over human beings, helps us to recognise this possibility. . . . . Similarly at a stage more advanced it may be that private ownership of land will disappear. As that primitive freedom of the individual which existed before war established coercive institutions and personal slavery comes to be re-established as militancy declines; so it seems possible that the primitive ownership of land by the community, which, with the development of coercive institutions lapsed in large measure or wholly into private ownership, will be revived as industrialism further develops. The *régime* of contract, at present so far extended that the right of property in movables is recognised only as having arisen by exchange of services or products under agreements, or by gift from those who had acquired it under such agreements, may be further extended so far that the products of the soil will be recognised as property only by virtue of agreements between individuals as tenants and the community as landowner."[1]

The extreme caution of this prophecy will not escape notice; "it may be doubted," "may eventually be denied," "this possibility," "it may be," "it seems possible," these phrases expressive of hesitation and doubt seem to me most appropriate. Certainly "it may be doubted whether the final stage" of property-law "is at present reached," and for my own part I do not wish to deny that some day the state (possibly mankind at large) may make itself the supreme landlord and let out the land on leases. But the final stage is the ideal stage, and the success of Absolute Ethics depends upon our knowing something, and something precise about the final stage. It is really a matter of some importance to know whether property in land is demanded, or sanctioned, or tolerated, or condemned by the law of equal liberty, and if from Absolute Ethics we get no more than leave to doubt whether such property is rightful, it is to be feared that after all we must fall back on the "moral infidelity" of utilitarianism. Mr. Spencer compares the

[1] *Political Institutions*, § 540.

ownership of land to the ownership of slaves, and the comparison is apt for our purpose. As to the latter the law of equal liberty speaks unequivocally; for the right to personal freedom is perhaps the only right, save the right to life, that can be deduced therefrom. Even if we find some difficulty in persuading our law to condemn slavery founded upon contract, there is always open the way of escape to which Kant resorted, that, namely, of saying that the man who sells himself into slavery makes himself a thing, and being a thing can not be bound by his contract. But we must, if possible, prevail on the law to yield us as definite a conclusion about the ownership of lands and goods.

We must perforce admit for the sake of argument that property in land was "established by force"—the first deeds shall be written not with the pen but with the sword if Mr. Spencer so pleases. Nor will we dispute that property in movables is "established by contract," but to this phrase we must give some plausible meaning. It is true that in every civilised community the title to chattels is very often a title by contract, a title by sale. The *régime* of contract, to quote Mr. Spencer's words, is at present so far extended that the right of property in movables is recognised only as having arisen by exchange of services or products under agreements, or by gift from those who had acquired it under such agreements. This is not quite true, for the only title a proprietor has may have arisen from long-continued peaceable possession, and the easy admission that such a title is good is a characteristic mark which distinguishes late from early law. Still Mr. Spencer's proposition is in the main true, but then it is already just equally true of property in land. Purchase, gift, inheritance, undisputed possession, these are the titles to land as well as to goods. As a matter of fact, for the last three or four hundred years illegal force has had just as little to do with the transfer of land in this country as with the transfer of goods, and legal force has had quite as much to do in protecting the owner of chattels as in protecting the landowner. But of course it is not of the title to existing chattels that Mr. Spencer speaks, for trace that title but two or three stages back and it is seen to involve a title to land and therefore to be established by force. It must be of property as an institution and of the beginnings of that institution that he speaks, and it must be here that he finds reason for the antithesis of force and contract. Men have agreed that there shall be property in movables, they have not agreed that there shall be property in land. Now we must not seriously impute to Mr. Spencer the queer old notion that

men did not respect property in movables until, in due form of Natural Law, they had agreed to respect it, but he shall have the advantage of every hypothesis, however extravagant, as to the past. Suppose even that all men met together and made solemn compact that there should be property in movables. Suppose also that this display of ancestral wisdom demands our humblest reverence. All this is not to the point when we are considering the question raised in *Social Statics*, whether our present or any other distribution of proprietary rights can be sanctioned by that impracticable First Principle. How, we are driven to ask, are you to make good your right to the money in your purse, the wine in your cellar, the cotton in your warehouse? Some one owned a mine, a vineyard, a plantation, and you (to put your case at its best) have bought from him. But his property was established by force, his land was part of the common inheritance. "Would the original claimants be non-suited at the bar of reason because the thing stolen from them had changed hands? Certainly not."[1] Your right is "in an ethical point of view entirely valueless," and no historical theory can give it any value, unless, indeed, we are to suppose that property in land as well as property in movables is somehow or another "established by contract". At least this can not be done by any theory that will bear one moment's consideration. This qualification I add because in his latest work Mr. Spencer contrasts private property in "things produced by labour" with private property in "the inhabited area which can not be produced by labour".[2] Of course, however, after his refutation of Locke and the backwoodsman he does not intend to base property on labour. The author of *First Principles* has not yet to learn that man does not make matter, the author of *Social Statics* has not yet to learn that mixing our labour with matter does not make that matter ours.

If this reasoning be sound it is hardly worth while to suggest any further difficulties. In these pages, at least, it would be unnecessary to say that should we deduce from our law of equal liberty the rightfulness of something called *property*, little is thereby accomplished. We want to know very much more than this before we can admit the success of Mr. Spencer's method. We want, for instance, to know something about the extent of testamentary power which this law permits or prescribes, and there is still, outstanding, that old question which Locke put to Sir Robert Filmer—Who is heir by the law of

[1] *Soc. Stat.*, c. 9, § 3. [2] *Pol. Inst.*, § 541.

nature? One remark must suffice to show the nature of these difficulties. It does seem, as Mr. Spencer himself thought, quite out of the question, that his principle should permit a man to gain a right simply by persistent wrong-doing. But to admit that a right may thus be gained, is, as already said, a marked characteristic of civilised law, and the more civilised, the more industrial we become, the easier we make it for men to acquire property in this way. We do not even feign that the rightful owner has acquiesced in the usurpation or been negligent about the assertion of his rights. At one moment a man is a trespasser; the clock strikes, and he is the rightful owner. How can the law of equal liberty sanction or tolerate this, without sanctioning, or, at least, tolerating whatever rules imposed by prince or parliament prove for the convenience of mankind?

So much has here been said of proprietary rights, that little, if any, space remains for the consideration of those other rights which Mr. Spencer proposed to deduce from his First Principle. His treatment of property has particular claims upon our attention both because it is, as yet, the most fully worked-out example of the results that may be expected from Absolute Ethics, and because the practical part of his political teaching requires that he should place proprietary rights beyond the reach of any assaults that may be made by socialist or opportunist. But a very brief glance may be cast at his deduction of some other rights.

The first rights which he sought to obtain were "the rights of life and of personal liberty".[1] These, as I think, must be conceded to him. If A kills B it is physically impossible that B should kill A, and if A puts B under lock and key, then so long as the restraint lasts, B is not free to do the same by A. One naturally expects that Mr. Spencer will next deduce that right to be free from bodily injury, from wounds and blows, which is nearly related to the rights just mentioned. It may be by an accident that he has omitted to do so, or he may not have thought it worth doing, but none the less the task has its difficulties. If A smites B, the latter not unfrequently finds himself perfectly free to repay the blow with interest. This is not always the case, and very antique law does draw a marked distinction between an injury that does and an injury that does not deprive the injured person of the power of fighting; but it would be a curious justification of semi-barbarism were maiming, condemned by our First Principle, the only

[1] *Soc. Stat.*, c. 8.

principle at present capable of scientific development, while mere "dry blows" were subjected only to the empirical restrictions of negative benevolence. A way of escape might seem to be open to us in the doctrine that "every pain decreases vitality,"[1] that every pain involves some loss of power and therefore some loss of liberty. But Mr. Spencer distinctly refuses to avail himself of this refuge, and could hardly do so without falling into the unscientific utilitarianism. "A man may behave unamiably, may use harsh language, or annoy by disgusting habits; and whoso thus offends the normal feelings of his fellows, manifestly diminishes happiness."[2] Nevertheless we are told that his conduct is not condemned by the law of equal liberty; he merely fails in negative beneficence. What is true of the pain occasioned by harsh language is seemingly true also of the pain occasioned by a cuff or a kick; each, if Mr. Spencer's biology and psychology be correct, will decrease vitality, but the latter need no more than the former prevent him who is hurt from having equal liberty with him who hurts.

Thus among the acts causing bodily pain for which men now are punished or compelled to make reparation we must distinguish those which do from those which do not infringe the law of equal liberty; for it is only the former that the state may use its power to suppress, and any attempt to suppress the latter by coercive action would itself be a breach of the law. The result will be not a little strange, but there seems no choice except to hold either that he who beats his neighbour is not to be punished or that he who speaks harshly to his neighbour may rightfully be punished if pain will be saved thereby.

A similar difficulty occurs when we pass to "the right of property in character".[3] Mr. Spencer argues that a good reputation may be regarded as property, but in the end admits that possibly his reasoning may be thought inconclusive.

> "The position that character is property may be considered open to dispute; and it must be confessed that the propriety of so classifying it is not provable with logical precision. Should any urge that this admission is fatal to the argument, they have the alternative of regarding slander as a breach, not of that primary law which forbids us to trench upon each other's spheres of activity, but of that secondary one which forbids us to inflict pain on each other."

This, he says, illustrates a remark previously made, namely, that the division of morality into separate sections,

[1] *Data*, § 36. [2] *Soc. Stat.*, c. 4, § 4. [3] *Ib.*, c. 12.

though needful for our due comprehension of it, is yet artificial.[1] Now it may at once be allowed that were this a question of mere classification, a question whether the rule which forbids slander looks best under the heading of Justice or the heading of Beneficence, it would hardly be worth discussing, being a matter of taste; but the question whether slander be forbidden by the First Principle is surely one of substantial importance, for on our answer to it depends whether or not the community may rightly strive to prevent slander by punishing the slanderer and giving the slandered a claim for reparation. To use coercion when it is not needed for the maintenance of equal liberty is to infringe the sovereign rule.

It may seem easy at first sight to get from this rule that "right of property in ideas," [2] for which Mr. Spencer vigorously pleads, but really in this case there is just the same difficulty to be met as that which faced us when discussing property in material things. The poet, the artist, the inventor, the discoverer, has but like the confuted backwoodsman made unto himself a clearing, improved some part of the common inheritance and mixed his labour therewith. The cosmopolite must explain to him also, that appropriation is only lawful when "enough and as good is left in common for others". A man who wrote a book and could conscientiously say of it that nothing therein contained was due to any one but himself, would assuredly need no law of copyright to protect him in the enjoyment of his perfect originality. Mr. Spencer does not say this, but he does grant that this proprietary right cannot be admitted without limitation, for it is highly probable that the causes leading to the evolution of a new idea in one mind will eventually produce a like result in some other mind. "Such being the fact, there arises a qualification to the right of property in ideas which it seems difficult and even impossible to specify definitely." [3] "Such a difficulty does not," we are told, "in the least militate against the right itself," and yet another important department of law seems here handed over to the empiricist.

Of the rights of women, the rights of children and, above all, that crowning right, the right to ignore the state, it would hardly be fair to speak at present, since here we have both warning in the preface to *Social Statics* and some indications in other books that we are not yet in full possession of Mr. Spencer's mature opinions. He perhaps would now say that

[1] *Soc. Stat.*, § 3. [2] *Ib.*, c. 11. [3] *Ib.*, c. 11, § 5.

the right to ignore the state will never exist as a right, but that the time will come when no society or community will wish to retain a member who wishes to be quit of it. Apparently he does not think that we have yet reached the stage when the law of equal liberty should without reserve be applied to women, and the liberties of children are certainly not what they were in 1850. "While an average increase of juvenile freedom is to be anticipated, there is reason to think that here and there it has already gone too far. I refer to the United States."[1] In mitigating his claim for a free nursery Mr. Spencer has, as it seems to me, made a large concession to common opinion, but at the same time thrown fresh doubt upon his First Principle. "For, if it be asserted that the law of equal freedom applies only to adults; that is, if it be asserted that men have rights, but that children have none, we are immediately met by this question—When does the child become a man? at what period does the human being pass out of the condition of having no rights, into the condition of having rights? None will have the folly to quote the arbitrary dictum of the statute-book as an answer."[2] The temptation to quote the arbitrary dictum is not overpowering, but some sort of answer is now required of Mr. Spencer himself, and it seems likely that the word *man* in our supreme rule must be subjected to an interpreting clause which will be no better than a piece of most empirical utilitarianism.

It is still however possible to hope that Mr. Spencer will make over, or has already made over, the law of equal liberty to its true owners, the metapoliticians, the people who would solve ethical and political problems by juristic methods. They know what to do with it, and by implying a contract here and inventing an estoppel there can turn out a result sometimes ingenious and not always anarchical. But Mr. Spencer is much too great a philosopher to stoop to these little tricks of the trade, and will find, or perhaps has already found, that his practical teaching in politics has nothing to gain from alliance with this unmanageable formula.

F. W. MAITLAND.

[1] *Principles of Sociology*, § 341. [2] *Soc. Stat.*, c. 17, § 1.

IV.—THE QUESTION OF IDEALISM IN KANT: THE TWO EDITIONS.

This is a question in the investigation of which I have expended a considerable amount of pains; but what I mean to do here is to break ground upon it by an examination of Ueberweg's Latin little work in regard to it.[1] Ueberweg has here brought the subject before us in a very clear manner; and, in regard to Kant, he is an inquirer so laborious, faithful, sound-minded, and yet pious, that, while it is for our advantage to become acquainted with the materials as he disposes them, he himself well merits what little precedence this mode of procedure may seem to accord him.

As is but right, Ueberweg opens with the relative declarations of Kant himself. Kant testifies, he says, that identically the same doctrine is exhibited in both editions, the first and second namely, of the *Kritik of Pure Reason;* that, in the latter of them, he has here and there altered words, indeed, but for no other reason than that there might be for the reader an easier and clearer understanding of the matters discussed. Nor is it inconsistent with this that there should be certain omissions, as well as certain additions; and in the case of the declaration of a man so distinguished at once for intellect and love of truth, there can be no room for doubt.

Now, on the whole, I agree with Ueberweg here; but I, partially, also disagree. I believe Kant's special theory to have remained, at least in his own mind, always the same; but I believe, as well, that, scandalised by certain misrepresentations of his doctrine as mere Berkleianism, he had, with the idea of discrediting and extinguishing the charge, omitted here, and accentuated there, not without the addition of direct expressions that, while all-too strongly

[1] *De priore et posteriore forma Kantianae Critices rationis purae*, Berol, 1862. Ueberweg describes here Kant's inquiry as being, "Quibus ex fontibus emanet, quibusque finibus circumscripta sit, rationis ad res cognoscendas facultas": that is, the *Kritik of Pure Reason* is a Theory of Perception, what the Germans themselves call an *Erkenntnisstheorie*.—The reader is understood to know that, in portions,—the first third of the work, —Kant's second edition of the *K. of P. R.* differs considerably from the first, especially in what seems to concern the question of subjective idealism.

opposed to idealism, and opposed, consequently, and with surprise, to others previously of his own,—were not altogether free from something of disingenuousness and *double-entendre*. This, my general position, being understood, we may proceed with the considerations of Ueberweg, in regard to Jacobi, Michelet, Schopenhauer, Fischer, and others, each in its order.

So far as change of doctrine is concerned, there is scarcely to be seen any support in Jacobi. He simply prefers the first edition to the second, and surely with reason as regards the special portions of the "deduction" to which he refers. These portions are certainly very much more direct and clear in the one form than in the other. In fact, he that feels himself hopelessly puzzled in regard to synthesis in the second edition, can only procure himself light by having recourse to the first. Further, Jacobi represents Kant, not as cowed and renegade with respect to idealism, but, rather on the contrary, as replacing what was only "an inconsequent semi-idealism by a complete and thoroughly consistent universal idealism that embraced both worlds". On the whole then, Jacobi's blame to Kant is only this: "I hold the loss for the reader, which Kant admits, to be extremely important".

From Michelet, again, as quoted by Rosenkranz, we have as follows:—

"The prominence given to the subjectivity of thought is to be acknowledged as an immortal merit of the Kantian philosophy. There was nothing wanting but that Kant had consciously gone on to throw down the wall that lay between thought and thing—a wall which, in his system, seems again and again to totter,—especially in the first edition of the *Kritik of Pure Reason*, which contained much that, in the highest degree speculative, will be looked for in vain in the second and subsequent editions. For these, and in part also the *Prolegomena*, allow the *idealistic* tendency somewhat to *recede*, because Kant saw that this side of his philosophy was the most directly exposed to attack and misunderstanding."

Now, there seems really nothing so far, that we should take exception to. It may or may not be a merit that Kant accentuated the subjectivity of thought, and it may or may not be true that he just failed to throw down the wall between thought and thing; but it seems, at least to me, certain that both the *Prolegomena* and the second edition of the *K. of P. R.* did, in comparison with the first edition, allow the idealistic stand-point somewhat to recede, and for no other reason than the attacks (of course, in the Berkeley reference) to which the general doctrine had been exposed. Doubtless, too, in that reference, subjective idealism being such to Michelet, much highly speculative matter, contained

in the one edition, had disappeared from the other. So far, surely, Michelet is perfectly correct—correct to the very letter. Ueberweg, however, makes other quotations in this connexion, and it is on these that the weight of his displeasure falls. They concern certain passages in Kant, which are as follows, and I take leave to quote fully what in Ueberweg we find somewhat abridged :—

"Were matter a thing in itself, it would, as of a composite nature, completely distinguish itself from the soul as simple. But it is a mere phenomenal presentation to external sense, the noumenal substrate of which is to be known by no adducible predicate whatever. I may certainly assume of this latter that,—although, indeed, in the mode in which it affects our sense, it produces in us the perception of what is extended and, consequently, composite,—it is still in itself simple, and to the substance in itself, therefore, to which in respect of our external sense extension attaches, there belong thoughts which may be consciously conceived through its own inner sense. In this way, precisely the same thing, which, in one reference, is termed corporeal, would, in another, be at the same time a thinking being.—If we compare, however, the thinking ego, not with matter, but with that *intelligibilé* (to call it so) which lies under the external sense-presentation which we term matter, then, inasmuch as we know nothing at all about it, we cannot say of said *intelligibilé* that the soul distinguishes itself from it any way inwardly at all" (Kant, *WW.* ii. 288 *sq.*). "Ego, presented through internal sense in time, and objects in space outside of me, are, specifically, without doubt, wholly different sense-presentations (phenomena), but they are not thereby thought as different *things* (noumena). The transcendental object (thing, thing-in-itself, noumenon), which lies under external sense-presentations, as also that that lies under internal perception—this object is neither matter, nor a thinking being in itself, but (to us) an unknown ground of the presentations which furnish us with the empirical notion in the one case, as well as in the other" (ii. 303).

Michelet sees here (especially in the fourth sentence above—"In this way," &c.), examples of those "fine passages where *speculative truth* lifts the veil of *subjective idealism*, if only immediately to let it fall again". And, surely, as it appears to me, most people will agree with him, at least so far as an avowal of subjective idealism is concerned. Kant, as quoted, undoubtedly affirms: first, that there are causal noumena underlying all our sense-presentations whether external or internal; second, that these noumena, however unlike in their resulting presentations, may not be different things (things-in-themselves, namely); third, that the noumenon subjacent to presentations extended and composite may be simple, and even possessed of thoughts, of consciousness, of conception, and of an internal sense; fourth, that we cannot say of the soul that it is in any way internally different from this noumenon; fifth, that the thinking ego is in this reference identified with the soul; and sixth, that the ego and objects

without, may be, noumenally, or transcendentally, that is as things, things-in-themselves, not different. Now, if it be certain that that is precisely what Kant says, it is equally certain that Michelet says exactly the same thing and nothing else,—as thus. "Kant, now, holds it as not impossible that this one object, the thing-in-itself, which lies behind all the manifold of the presentation to sense, may be one and the same thinking substance with the ego." Of course, it is to be at once allowed that, as what is spoken of is something utterly unknown, it may be hypothetically complemented with every possibility whatever, and that all Kant's relative speech is but an idle dalliance of the moment, to any possible consequences of which he is not seriously to be held. That, of course, is, to a certain extent, true, we say; but it is surely legitimate to point out that Kant's mind must very often, and in truth very seriously, have occupied itself with such speculations, let them be as hypothetical as they may. So far as his own expressions go, they are good evidence for this, that he did think to himself, what can be the ground of these ideas in me which I call presentations to sense? They must have a source,—now what can it be? Is it one or many? Is it the same for what I call external, as for what I call internal sense? Is it of the nature of mind, or is it of the nature of matter? Where is it? It cannot be what we call *out;* for nothing is out but what is in space, and there is nothing in space but what is a presentation to sense, which it, very certainly, by no manner of means is. Is it, then, *in* me, and so *me?* Surely, it is very legitimate, from all that has been quoted, to figure for Kant such thoughts as these. Why, what else does that altogether unquestioned and unquestionable word of Kant amount to, "There are two stems of human cognition, sprung, it may be, from a common but unknown root,—namely, sense and understanding, by the former of which objects are given to us, and by the latter thought"? Does not that single word, taken in its connexions of course, grant the whole case, and can we wonder that henceforth, by the successors of Kant, "the wall between thought and thing," really *was* assumed to be broken down, and an absolute idealism established?

I cannot say, then, that I am quite pleased to hear Ueberweg remark, with such words in regard as we have seen whether on the one side or the other, that Kant does not characterise the thing-in-itself as "the same with the essence ego"; that he grants, indeed, "the transcendental substrate of matter to be possibly a thinking substance, but

that he does not at all think, or wish it to be supposed legitimate to think, this substrate the *same* with *our* mind;" that Michelet has substituted "unity" (identity) for "likeness and agreement," &c., &c. It is impossible not to see that Ueberweg has chosen to trust himself here to a simple difference of words, and of words, perhaps, that have an identity of meaning, Kant does not say exactly "same"; but he does say "not different," and where there is no difference, it is not unusual to find sameness. It is, on the whole, rather too adventurous of Ueberweg to ride off so confidently, as it were, on the bare letter. Nay, after all, it is not on Kant's letter he takes his ride, but on a substitution of his own. If Michelet construes "not different" into *sameness*, Ueberweg, for his part, converts it into *likeness and agreement*. I wonder which has the better right on his side. Surely it is not Ueberweg. To replace nullity of difference by mere similarity and agreement (Ueberweg's Latin words are "*similitudo*" and "*convenientia*"), is a proceeding, on the whole, a little more oblique and strained, than to have recourse to the surrogate of sameness. Numerical identity with Kant does seem to be at a greater distance from Ueberweg than from Michelet. Of course there is to be granted to Ueberweg that, besides the mere play at *suppose this* and *suppose that*, Kant does, in the last quotation, verbally contradict himself: "The transcendental object, whether for without or for within, is—neither matter, nor a thinking being in itself!" It is but fair to point out that, settle it who may. We may mention here too—as something that might have been worth Ueberweg's looking at—certain further Berkleian inferences. When Kant, namely, says that the thing-in-itself, underlying both externality and internality, may be one and the same thinking substance, it is impossible not to think of the *rôle* which Berkeley assigns to God. What more likely supposition than that, since there must be a source for our ideas, and since that source is possibly a single thinking being, this source and this being can be nothing but God? Here, surely, there is in Kant an assonance to subjective idealism, if ever such assonance was—an assonance that might have staggered even Ueberweg! Indeed, one cannot quite be sure that what Ueberweg himself reads into Michelet's quotations from Kant is not itself idealism. He admits that "nothing hinders either the supposition of both substrates (external and internal) being very like each other *(inter se simillima)*, or even the conjecture that the very thing which seems to us a body may, being

endowed with a certain internal sense, seem to itself a soul". It is quite possible that Ueberweg had some consideration here which, to his belief, still saved Kant from Berkleianism. As much as that we may suppose indicated in the words which describe Kant's doctrine, all passages concerned being considered, thus:—"As it is a recession at once from a realism and an idealism merely subjective, so also, it is an approach to true idealism and that philosophy which correctly speculates things, and whose principle is that most celebrated sentence, *cogitare et esse unum esse idemque*" (the τὸ γὰρ αὐτὸ νοεῖν ἐστίν τε καὶ εἶναι which Berkeley, *Siris*, 309, phrases and translates, "To understand and to be, are, according to Parmenides, the same thing"). At the same time, it is not to be forgotten that Ueberweg's main object is, so far as the two editions are concerned, to vindicate for Kant consistency of doctrine in both—an adventure that certainly runs risk of foundering at any moment on the fact that the passages most loudly idealistic in sound have been omitted from the second edition, and in such wise, too, that it will be hard to get us to acknowledge with Ueberweg that what has been omitted was a mere gratuitous hypothesis, capable of misleading if left. It is quite certain that Kant's mind was much exercised on the subject, that he did speculate, ratiocinate, and revolve in that direction, that he did conjecture that the outer thing might be a thinking thing, and this thinking thing not different from our ego. It is really impossible to absolve Ueberweg from a mere play with literal expression here, so far as Michelet's report is concerned. As said, he has a little too confidently ridden the bare letter, and that letter, after all, pretty much Ueberweg's own, for Ueberweg's interpretation is much more the attribution of an alien opinion ("sententiam alienam") to Kant, than Michelet's was. If Kant says "not different," surely Michelet has a better right to say *same* than Ueberweg *similitudo* or *convenientia*.

Herr Dr. Schopenhauer, as we may be aware, is emphatically the German Berkleian. *No object without a subject* is, in a way, his entire philosophy; and he is fully assured that all the things of this world—even the twenty feet of gilt frame, scrolls and all, that surrounded his chimney looking-glass, as was once wickedly put to him—are packed within his own ego, and never outside of it at all. Accordingly, he had been gratified to find, in many passages of the *K.* of *P. R.*, a distinct enunciation of the proposition of Berkeley; but he had also been shocked and scandalised

by what equally appeared elsewhere as an "evasion" of it. From the consequent unhappy state of mind, he was thankful to have been rescued by a perusal of the work in its now rare first edition. "To his great joy, all the contradictions disappeared"; and he saw "that Kant, though he does not exactly flaunt the formula, *no object without a subject*, yet, with just as much decision as Berkeley and I, declares the external world, presented there in space and time, to be mere idea of the subject perceiving it". Henceforth, accordingly, the gratitude of the worthy Herr Doctor is literally boundless. Kant is the man "whose depth of intellect he admires and venerates"; Kant is the man "to whom he owes so much, and so much that is great, that his spirit might say to him, in the words of Homer,

'Αχλὺν δ' αὖ τοι ἀπ' ὀφθαλμῶν ἔλον, ἣ πρὶν ἐπῆεν".

And yet, when one considers of it, it occurs that, in this reference, Schopenhauer must be a peculiarly gentle being, and very amiably thankful for small favours—this because we presently find that there is no philosophical system in existence which gives Schopenhauer more occupation for the pulling of it to pieces. Kant is wrong on causality, Kant is wrong on reciprocity—Kant is wrong on the whole twelve categories indeed, and if the reader wants to see what alone is right, he is duly referred, by number and page, to respective sections of Schopenhauer's own. In fact, Schopenhauer's objections to Kant are quite unmanageable in numbers, and it is difficult to see what it is he has ever learnt from him that he did not know perfectly well before, if not from Berkeley, then from his own self. The great thing he makes such a veritable cackling over in the end is, as he himself directly avows, the "*Maya*"; that is, what is so familiar to us as the "ideal theory"; what has just been described, indeed, as that ultimum of learning, wisdom and philosophy which declares the object—that is, the whole vast universe—to be *idea* of the subject! (It really *is* so; but it is the idea of *the* subject, God.—Curious to think, that, in a way, however diverse the thoughts are, Berkeley says the same thing too!)

But Schopenhauer requires to be taken, in this matter, a little more particularly still. His words are reported at full length by Rosenkranz; and we are now in a very fair condition, not incorrectly, and, I hope, not unrighteously, to judge of them. Nevertheless, to repeat them here *in extenso*

would take up more space than they are well worth, and I shall content myself with allusion.

Of the difference between Kant's two editions, we may now be disposed to conjecture that it lay simply, not only in omission, on the one hand, of what might seem as in support of an internal thing-in-itself, too much to befriend Berkeley, but not less in accentuation, on the other hand, of what, as in support of such thing-in-itself only externally, might seem all undeniably to oppugn Berkeley. That Kant's second edition should, in consequence of only as much as that, be characterised as "self-contradictory," "mangled," "disfigured," "ruined," and he himself accused of falsehood, fraud, and wilful imposition (*Unterschleif*, &c.), and only from a cowardly terror of his fellow-men, in the failing heart of a frail old man—all that we feel to be only characteristic of the eminently weak, self-contradictory, hectically rash and mis-seeing *littérateur*, Schopenhauer himself. The whole account, indeed, is throughout extravagant to absurdity; and there is not one word of truth in it unless we interpret it to say, in the respective reference, that Kant, with a certain disingenuousness of expression, was moved by the charge of Berkleianism—grossly unjust and dangerously injurious as it was—at once to omit here and accentuate there.

Ueberweg adds a few quotations from Schopenhauer which are not found in Rosenkranz: as, that Kant's contradictions of doctrine in his second edition are wanting in his first; that in the former, namely, he had wrongly regarded the thing-in-itself as a certain object or noumenon, and credited it with the law of causality; that, instead of exhibiting the object as directly dependent on the subject, he had, with infinite toil and trouble, only made the mode and manner of objectivity dependent on the peculiar faculty of the subject, with no result but this, that things are not in themselves as we perceive them, yet still that there does remain, as thing-in-itself, an object, a noumenon, which is wrong, for there is no object that is unconditioned, nor can any such be a thing-in-itself, inasmuch as it is the subject that wholly presupposes it; that it is a gross inconsequence only to obtain this noumenon by an extension of the law of causality which Kant himself had declared to be impossible; that Kant's true doctrine lay in these words of the first edition: "If I abstract from the thinking subject, the whole world must disappear, as being nothing but presentation in the sensibility of our subject, and a kind of ideas of it;" and hat he had even left in his second edition passages to this

effect—naming four pages in chapters vi. and vii. of the Antinomies.

There is a just enough thought here and there in the above, taking what is said on its own level; but Ueberweg is still right in pointing out that, as regards *doctrine*, expressions as strong as those referred to by Schopenhauer are to be found repeated in both editions. From both editions, for example, we can quote (ii., 162): "For we have always to do only with our own affections; how things may be in themselves (without respect of the impressions by which they affect us) is completely beyond the sphere of our cognition"; and also (ii., 388): "All that is perceived in space and time, consequently all objects of an experience possible for us, are nothing but presentations to sense, that is, mere perceptions which, as they are perceived, namely as extended objects or series of changes, have no existence outside of our thoughts and founded in itself". Such presentations to sense are truly for Kant the "only things empirically objective"; at the same time that the assumption of a thing-in-itself, or noumenon, or transcendental object, may justify us in crediting Kant, at least so far, with—in Ueberweg's words—"an axiom of realism".

Schopenhauer, from some expressions, as that the object should be wholly dependent on the subject, seems, though obscurely, perhaps, and hardly with his own consciousness, to have some idea of the necessity of an experience as such, not one among others as with Kant, whom he would appear to blame for making experience, so to speak, only relative to a very relative subjective faculty.

Only in one point Ueberweg allows Schopenhauer reason, —in that, namely, which concerns the attribution of causality to the transcendental object (otherwise, of course, noumenon or thing-in-itself). This is a point which, even in Kant's life-time, had been very cogently raised both by Jacobi and Aenesidemus Schulze; and here Ueberweg is wholly as they. Causality, namely, in Kant's theory, is reserved for phenomena (the sense-presentations) alone; nevertheless, and for all that, he does attribute it to the noumena as well: as Ueberweg says, it is "by virtue of those transcendental objects that the empirical ideas (perceptions, to wit) are effected in the human mind". This is probably seen at its glaringest, so to speak, in the quite unambiguously idealistic passage which so, far as I know, it had been left for the *Text-Book to Kant* (pp. 448 *sq.*) to point out as inadvertently left standing in the second edition

unaltered.[1] For it is said there that, while the transcendental object cannot possibly "be thought as quantity, or quality, or substance," &c.,—that is, as any category,—it is yet to be regarded "as cause of the *Erscheinungen* (the sense-presentations)". What, namely, cannot possibly be *any* category, is still, for all that, eminently and pre-eminently *the* category,—just the category *of* categories! We have already seen the relative remark of Schopenhauer. That of Jacobi has all the subtlety of insight and literary perfection of statement which we are accustomed to at his hands. Kant, he says, uses the noumena as causes of impressions in us, and yet holds these latter (the impressions), not to be anything external, but only ideas within, while of those former, again (the noumena), we know nothing whatever: "they are only hypothetically assumed by Kant as intelligible causes of the presentations to sense; merely that we may have what, to sense as a receptivity, shall be respondent or correspondent". "Truly," adds Jacobi, and this is what I mean above as admirable, "it is not very well possible to see how, without this supposition, the Kantian philosophy could find door into itself; I, for my part, *without* it, should be unable to *get* in, while *with* it, I am equally unable to *remain* in." With his consequent conclusion on the whole matter, Ueberweg completely agrees, and even clinches it thus: "This contradiction is undoubtedly extant in Kant; it breaks up the foundations of his philosophy; it annihilates his whole system; but it is to be distinctly recognised in either edition of his book."

Now, I wonder if, after all, there cannot be said a single little word for Kant here. There cannot be a doubt that he himself was quite well aware of the so-called contradiction; it abundantly occurs in both of his editions; and it was, directly, expressly, unescapeably, put before him. What he has done, then, in that respect, he has done consciously and with his eyes open. Could he have had

[1] Since this paper left my hands, I have read certain writings of Dr. Benno Erdmann. I find him to be far and away the most accomplished expert in Kantian *loci* whom I have met, and, though I do not always agree in his conclusions, I think Dr. Arnoldt has been too hard upon him. Dr. B. Erdmann is perfectly familiar with the passage referred to above; but I have not seen that he has perceived its peculiar importance to lie in the fact that—even isolatedly—it has been inadvertently left standing unaltered. It was that I pointed out to Ueberweg when he sent me his little "dissertatio;" he did not conceal the shock it offered to his all-too unexceptive justification of Kant; and he who reads his *Logic (Modern History of Philosophy)* in the latest edition, will acknowledge that, substantially, he comes very much to my own position.

any reason in his own mind that quite reconciled him to the propriety of the expedient? It was plain that some expedient was an absolute necessity. How, as Jacobi says, was the system otherwise to get entrance into itself? The world consisted only in these subjective characters impressed on our own minds; it was impossible not to ask, What impressed them? Berkeley, in the same circumstances came, as we know, to the answer, God—God impressed them. But, if we consider with what Kant started,—the reason of the apodictic necessity, namely, which we undoubtedly ascribe to causation,—and how he was led from point to point, in his progress, until his whole system, at least as internally constructed, stood complete before him, I think we shall see that, within or without, it would be more to an objective influence, so to speak, than to a transcendentally personal one, that he would be led. Arrived there, it would only be natural for him to say to himself: The source, the influence, to which I am to attribute all these innumerable characters within me, can only be an unknown noumenal one, whether one or many, I know not; whether, in an absolute sense, within or without, I know not; whether material or immaterial, or of what nature soever, I know not.

Now, after all, is not this quite natural, eminently human, nay, not intolerably irrational? It may be to phenomenal causality that we owe the trick; and it may be absurd noumenally to extend it;—but we cannot help ourselves: for a fact, for a presentant fact of any kind, we must ask the origin. What, then, is so natural to us—shall we deny that to Kant? Shall we coldly say, No; you have yourself peculiarly placed and empowered causality, and you must take the consequences; it is your own act? I do not know that this is quite just; I am disposed, rather, to allow Kant the benefit of the device. Was it, after all, an unallowable thing to refer the phenomena to *some* source, and was it very much to trench on the allowable to say, I only speak of an unknown x,—I leave it in the absolute,—I do not pretend to describe it,—I do not even pretend to describe, and still less prescribe, its influence or powers. It, with its powers and its influences, I leave in the transcendental and transcendent *other*. I only ask to be allowed no more than the bare hypothesis of a simple x—as respondent or correspondent to an element which we all assume to be sensitive and receptive.

I, for my part, in conclusion here, will avow that, if said

x were all I had against the system of Kant, then there were no devouter Kantian in the universe than I.

The last commentator on the difference of the two editions, of whom we have to speak here, is Kuno Fischer. He, too, is disposed to agree with those who find subjective idealism in the first edition, and a recantation of it in the second. Ueberweg supplies us with sufficient quotations (from the third volume of the *Geschichte der neueren Philosophie*). Fischer maintains, it seems, "that a very serious contradiction has crept into the doctrine of Kant through his retrocession, in his second edition, from the true views in regard to time and space expressed in his first". "There is no question," he says again, "but that Kant intentionally held back the strict idealism of his doctrine, in order to make it popular and exoteric; people wanted the small concession from him, that the presentations to sense are something besides ideas; Kant made it, and so won for himself that numerous school which he would hardly have got otherwise." Of course, truth in these words goes no farther than what has been so often said about expressions, on Kant's part, omitted here, and others accentuated there. All that about popularity, numerous school, &c., is but the ornamental filling-in of a critical subtlety that need not look far. Ueberweg, very properly, restricts his speech here to this: "That Fischer has played the poet and the orator; but in the composition of a history of philosophy, neither poet nor orator has any part to play". There is the further censure of Fischer, indeed, for saying that Kant in his second edition had falsely spoken "as though the thing-in-itself were contained in the sense-presentation as its concealed x". "Contained in" is, perhaps, fully strong; but it *may* mean only *underlying;* and in that case it is quite right.

The opinion of Ueberweg himself, as more than once already before us,—namely, that Kant altered expressions only, and that neither that change nor those of omission or addition were made for any other purpose than to assist the reader,—certainly errs by excess. I quite agree that, throughout the two editions, the general doctrine remains the same: "the phenomena," to use again Ueberweg's own words, "which are themselves nothing but ideas depend on certain things-in-themselves, or transcendental objects, which are neither in time nor space". But, then, are we not to consider all that Kant himself allows to be possibly said of these noumena? And, still more, are we to be blind to Kant's manifest panic at the charge of Berkleianism? In his anxiety, does he not rather blink this charge? In fact,

does he not, a little disingenuously, a little Jesuitically, attribute his whole relative action, not to anything that has to do with Berkleianism, but solely to a desire of increased commodity for the reader? Not but that as much simple, somewhat ostrich-like, cunning as that may be cheerfully allowed to the good old man without the slightest imputation on his "*incorrupta veritas*".

We may permit ourselves, in conclusion here, just to glance for a moment at the strange unawareness of the state of the case manifested by more than one of these claimants to a mastery of the doctrine of Kant. I do not mean mere oversights, of which I, for one, have to apologise for a goodly number; but fundamental mistakes in regard to much that, essential with Kant, seems yet to lie on his very surface. Here, in the half-dozen pages of this little essay of Ueberweg's, how many examples do we not find to countenance the statement!

Jürgen Bona Meyer, for instance, is a remarkable name and an excellent Kantian,—an excellent Kantian even to Ueberweg who, however, is rather surprised that "he should, without just cause, have persuaded himself that Kant did not deny the things-in-themselves to be in space, but left it in doubt whether they were in space or not". One is disposed, in consideration of simply our absolute ignorance of these things-in-themselves, to find, in the first instance, any such idea as this of Meyer's eminently venial; but still it is quite certain that it is undoubtedly wrong to speak of a thing-in-itself being in space, as though it (space), too, were a thing-in-itself. The thing-in-itself never reaches us in itself, but only in its impressions, and, consequently, it is not it, but only its impressions, that can possibly be received into the mere subjective form of our own sensibility within us, which space is.

Fischer displays elsewhere an error of an altogether different and more palpable nature. He talks, to take Ueberweg's report, as if Kant had two doctrines in regard to time and space. It is only with surprise that such an inapplicable word as that will fall on the ears of every Kantian. There is nothing in all Kant easier than what he means by time and space; and there is nothing in all Kant that remains, from first to last, more completely identical. Nay, there is nothing in such a doctrine, if once held, that very well could be altered. It is just possible, however, that Fischer's difficulty with time and space concerned, like Meyer's, not themselves, but the noumenon in respect of them; and that we have already discussed.

I have more difficulties with Hartenstein, and perhaps graver ones. He, certainly, of all Kant's editors, is the most faithful, careful, correct, excellent; and his edition of the *K. of P. R.* is, to me, undoubtedly the best. I should say editions here indeed, and not edition. Hartenstein edited in 1838 that issue of the works of Kant, which has always been understood, if less common, to run at least even with that of Rosenkranz and Schubert. To him also we owe an elegant and commodious separate edition of the *K. of P. R.* in 1853. Again in 1867 we had an issue of Kant's collected works at his hands; and we have even a fourth obligation to him in the special edition of the *K. of P. R.* in 1868. It is really hard, then, to have anything to object, in a Kantian reference, to so very accomplished and familiarly instructed a Kantian expert. Nevertheless, there may be some little gain in what I have to say here, and I shall not withhold it.

Hartenstein, in his preface to the issue of 1853, whilst stating that between the edition in 1781 and that in 1787 of the *K. of P. R.*, there are "not only in single places many smaller changes, but also two sections completely re-written," declares also that it appears to him "a sort of duty" to prefer that "form of exposition" which appeared to the author himself "the most appropriate expression of his thoughts". Besides, he adds,—and these are his reasons for adopting the text of the second or 1787 edition in his own,—it is the most currently used edition, and it offers certain typographical, or other, advantages. Then, as regards the changes, we find from him in the end that those of any importance consist in a new preface, a new introduction, a new "deduction," and a new or re-written section on the "paralogisms". The preface and introduction he characterises as improvements; but the "deduction," in his opinion, is not so, and any accusations as regards doctrine will require pretty well to confine themselves to the section named as referring to the paralogisms. In all this one can only concur, as also in his particular reasons for preferring, not the second deduction, but the *first*, which ran thus:—It is "indisputably" the best, not for any considerations that have idealism in regard, but because "the entire exposition, in accordance with the peculiar spirit of the *K. of P. R.*, exactly follows the clue of the several mental faculties and their functions," while certain particular disadvantages attend its successor. This appears to me very specially correct, and calculated to be of great service at this moment to the English student, whose attention has been much solicited of late by more than one critical

inquiry which, leaving the lines of Kant, have fallen into lines of their own, where any vestige of the originals is hardly to be recognised.

What I am disposed to disagree with lies in what follows the above. "When, on the other hand, in the second form of the deduction, the proposition that the understanding is itself the source of the laws of nature, gets expressly limited by the provision that the perceptive complex must still be given before, and independently of, the synthesis of the understanding, then in that there is to be found nothing less than a change of the fundamental principles, in consequence of which change Kant has, as it were, bungled his work, and left his system in extremity." Now, it is difficult to reconcile this with what I regard as an understanding of the commonest conditions of the Kantian machinery. The passage which we may suppose Hartenstein here specially to have in view, occurs in the last paragraph of § 21 of the new deduction, and it is to this effect:—

"The perceptive complex must be given before, and independently of, synthesis of the understanding, as will be particularised further on. For, should I conceive an understanding which did itself perceive (as, it may be, a divine one, not only with perception of objects, but with actual production to its own self of the very objects it then and there perceives), then the categories, in respect of any such sort of perception as that, would have absolutely no function. The categories are only rules for an understanding whose entire operation is to think, or, in other words, to bring into the unity of self-consciousness what synthesis of complex may, in sense-perception, be given it from elsewhere. Such an understanding, consequently, of itself, *perceives* absolutely nothing at all; it only connects and brings into order the materials for perceptive cognition, the sense-perception itself, that is, which sense-perception must be given it (the understanding) by the object. For the peculiarity of our understanding, however, *a priori* to bring about unity of self-consciousness, only through the categories, and only through precisely that kind and number of categories, there can just as little a reason be any further given, as why we have precisely these, and no other functions for judgments, or why time and space are the sole forms of our possible perception."

I am glad to quote this passage at full, as, in fact, it is itself alone a complete picture of the whole doctrine of Kant. There can be no cognition but that of the perception of systematically connected objects. Besides the divine cognition which, as we may suppose, not only cognises, but, even as it cognises, creates, its objects, there may be an infinite number of other cognitions such as the human one. *We* have such and such special sense, such and such general sense, such and such understanding endowed with such and such categories, &c.; but, in each of these particulars, there is the possibility of infinite variety, with the resultant

possibility, consequently, of an infinite variety of cognitions, consciousnesses, minds. Now this doctrine is the one central doctrine in Kant all through, whether in this edition, or in that, or in any edition, and it does look strange to see Hartenstein, with such familiar Kant in his hands, stumbling so signally over it. The perceptive complex—the raw material—must be given, so to speak, to the teeth of the understanding to card, else these teeth (the categories) would have nothing in the world to work on, and would remain, in consequence, wholly vacuous and idle. Nevertheless, the *a priori* forms of the understanding are the primary laws of nature. This is Kant's doctrine; and it is Kant's doctrine from first to last. Nor does it, in the slightest, compromise, obstruct, or interfere with that doctrine that, for the understanding to act, for the laws themselves to run their courses, it is absolutely necessary for an empirical element, a perceptive complex, to be first of all provided for them. It is to be feared that the expression 'laws of nature,' as so used, misleads, widely, not on the part of Hartenstein only, but on that of a great many others, to some very fatal mistakes. Laws of nature! such an expression calls up gravity, inertia, impenetrability, polarity, cohesion, motion, affinity, &c., &c.; but, taken from the mouth of Kant, it ought to call up only this: Things are extensive and intensive; they are related by substance and accident, by cause and effect, by action and reaction; and, lastly, they are, as to us, either possible, actual or necessary. Positively, that is the whole. That is the entire Table of the Laws of Nature, so far as Kant is concerned. That there are supplementary corollaries from these—that, of course, is very possible; but it is very possible, also, that even Kant may err in drawing them.

As though in support or explanation of what he had said, Hartenstein adds two clauses which, as they stand, seem meant to be opposed to each other, and so, as it were, make good a double contradiction on the part of Kant. What he had said, as we see, amounts to this, that the presupposition of sense for action of the categories compromising the attribution of the laws of nature to the understanding, the whole system is to be understood as compromised thereby. That is pointed off by a semicolon, and these are the clauses which follow: "Partly Kant, in the second edition, has placed precisely the proposition, that our perception constructs itself, not according to the objects, but, on the contrary, they construct themselves according to it,—quite expressly in the foreground, the preface,

namely of the whole work; partly, again, all the many passages in which he indicates the difference between mere thought and perceptive cognition are to be found in the first edition as well as the second." Now, in point of fact, neither of these clauses contradicts the other; nor does either, or do both, contradict what precedes. That understanding must presuppose sense; that objects must adapt themselves to our perception, and not our perception to them; that understanding, alone and by itself, must be simply logical, and not perceptive: these are not only main propositions, and quite consistent the one with the other, of the whole work; but they are essential moments of the single thought that lies at the bottom of all.

The unsatisfactoriness here becomes only all the more pronounced when we find Hartenstein going on in the very next words to affirm that Kant's half-idealism is no peculiarity of the second edition, but that it is "grounded from the first in the entire plan". Surely, these particulars, presently under review, are precisely the elements determinative of that "half-idealism," in regard to which as *pervading* element, Hartenstein is perfectly right. He is perfectly right, also, we may say here, in his strictures of the second form of the deduction of the categories. That, perhaps, is the worst piece of writing in the whole of Kant's works; who has taken no pains to lay down here the steps of the process in a clear order before his own self. Rather, indeed, on the whole, these steps seem only *mentioned*, now this one and now that one, without order, and only as a matter of course already understood. This is especially true in regard to all that concerns synthesis; for a regular, consecutive, and intelligible exposition of which, we have to turn to the first edition.

But, agreeing with Hartenstein as to general "Unklarheit" in the second deduction, we do not feel quite as sure of the case when he goes on to find that want of clearness specially in § 27. Here Hartenstein says Kant "makes futile endeavours to reconcile with the necessity of the categories that complete subjectivity of them which he has asserted elsewhere". Now, with this, too, one feels it natural to be surprised. The categories are of course subjective, and nothing but subjective,—in origin and place; but that is no reason why they should not be necessary in function. What has given pause to Hartenstein is probably this, that Kant, in this place, expressly denies necessity to certain other elements, and just for the reason that they are *subjective*. Why so are the categories, Hartenstein thinks. That is

quite true; but still the two things spoken of are quite different. The one is simply an arbitrary and blind instinct; the other is a logical element and brings *evidence*. The understanding, with its categories, is a *cognitive* element; and it is this, probably, which Hartenstein forgets.

I, too (*Text-Book to Kant*, p. 444), have an objection that may seem to bear on the same point, but that really regards something quite different. There are only three ways of it, says Kant. This necessity which we find in experience, as of the connexion of the effect with its cause (say), may either be derived by us from experience, or it may depend on cognitive elements anterior to, and determinative of, the very possibility of experience; or, a middle way, it may be innate, —an implanted instinct, as it were. To the first of these alternatives Kant objects that, experience being incompetent to necessity, any derivation of the latter from the former would amount merely to a *generatio aequivoca;* while the third would give a genesis due only to an arbitrary *pre-formation*, which would be only subjective and unpossessed of the objectivity of intellect. There remains, then, only the second alternative, that of a logical *epigenesis* from principles of intellect. Now, to this last alternative I do not object, like Hartenstein, that it too is subjective; for I grant it, as *logical* and *cognitive*, to bring *evidence*, and evidence that is *objective* and apodictically *necessary*. But I say the *epigenesis* can apply itself only when and where it finds materials to suit. If the logical nexus of the two things antecedent and consequent is to add itself on to a nexus of two empirical facts, in order to make the one cause and the other effect, then this latter nexus must, in some way or other, be recognised beforehand, and as analogous to, as simply a case of, the former nexus. The attribution of the one nexus to the other nexus can assign, consequently, only a validity borrowed, and not a validity native. In a word, it is obvious that the necessity of the category can only *varnish*, only *gild*, so to speak, the necessity already present in the facts.

The two objections in hand, then, are radically distinct; and Hartenstein, for his part, only forgets that, as Kant (with whom such considerations constitute, as it were, the very *theme* of the piece) says himself (*WW.* viii., 118), the one case (the *pre-formation*) concerns "a necessity *felt*," the other (the *epigenesis*) "a necessity *seen*," while both are in origin and situation undoubtedly subjective.

One is glad to find Hartenstein quite as stern in regard to the absurd and offensive extravagance of the unfortunate Schopenhauer as Ueberweg himself. "Fear of men," &c.!

Why, Kant maintained his "Kritik aller speculativen Theologie," and his chapter "Ueber die Disciplin der Vernunft im polemischen Gebrauche," throughout all his editions, with "not a word changed," for all "die Wöllnerschen Censur-und Religionsedicte" in 1788-1794!

I fear, however, when all is considered, that we shall be unable to acquit even Germans of a certain slovenliness in the mere reading of Kant. Macaulay remarks on the slovenliness with which most people are contented to think, and we may similarly remark on the slovenliness with which most people are contented to read.

But there is not a vestige of any such slovenliness in Ueberweg. Kant does not lie before him in passages only, and all the rest dark. I acknowledge in Ueberweg a thorough intelligence, and it is no contradiction to this, that I am nearly as much softer than he to Kant's noumenal causality as I am harder again to his concealment, or quasi-concealment, of the Berkleian shock.

Whether the entire subject itself of Kant's idealism and the difference of his two editions in its regard, has been adequately discussed in the foregoing, I willingly allow the reader to doubt: I only consider it myself as a preliminary breaking-ground on the question,—as a preliminary clearance of it.

J. Hutchison Stirling.

V.—PROFESSOR GREEN'S LAST WORK.[1]

This volume is the last fruit of the labours of the late Prof. Green, and though incomplete, and wanting, even in the part which is completed, the final corrections of the author, it is in some ways a fuller representation of his mind than anything which has hitherto been put before the public. In his Introduction to Hume, and his other published essays, he had indeed expressed the main principle of his philosophy, and had illustrated it very fully by a comparison with the main forms of Empiricism or Sensationalism. Perhaps the central ideas of Critical Philosophy have never been presented with greater force of evidence than in the former work. But in this volume he has, for the first time, given a positive and constructive statement of his ideas, freed as far as possible from controversial matter. The fact also that the book is about Ethics has brought another result with it, which will give it an additional interest for many: that so much of the man himself is expressed in it. The repressed strength of his moral and political interests, the severity and simplicity of his moral temper, the unpretending practical aims with which his Idealism was bound up, the deeply religious spirit which underlay all his views of life, must be brought vividly before any one who carefully studies these pages, and especially before all those who have ever come into any contact with the author. In this review it is not proposed to write anything in the way of criticism, but only to indicate what seems to be the general bearing of the argument—and even this can be done only imperfectly in the case of a book which is too full of meaning to admit of abridgment.

What is implied in the possibility of a moral philosophy, a philosophy which shall explain, but not explain away, the moral consciousness of men? There is implied in it—such at least is the view taken in this book—that man's life is not merely one among the other forms of nature, not merely one of the phenomena or series of phenomena, which are the *objects* of his knowledge. Yet the main effort of the prevailing school of English writers on these subjects is to explain the moral nature of man as a special modification of

[1] *Prolegomena to Ethics.* By the late T. H. Green, Whyte's Professor of Moral Philosophy in the University of Oxford. Edited by A. C. Bradley. Oxford: Clarendon Press, 1883. Pp. 427.

the general animal susceptibility of pleasure and pain, brought about by the influence of what is called the 'social medium'. Such a natural history of man rapidly reduces the moral sentiment and the consciousness of freedom and responsibility which goes along with it, to mere illusions, in regard to which the only problem is to explain how they arose. And if the anthropological moralist has the courage of his opinions, he will not be content with "reducing the speculative part of ethics to a natural science," but will proceed "to abolish the preceptive part of them altogether". For it is vain to preach to a being "who is merely the result of natural forces" that it is his duty "to conform to their laws".

This conclusion cannot be combated by any isolated treatment of the practical or moral side of man's life. For, if it be once admitted that man, as a perceiving and knowing subject, is a merely natural being, it will be found impossible to claim any exemption from natural law for his will. Hence the only way in which it is possible to maintain the reality of the ideas of duty and freedom, is that which Kant took, through the criticism of experience. Only if it can be shown that man, as a conscious subject, is something more than a natural object, will it be possible even to attempt a proof that his action is not an expression of nature and necessity. The aim, therefore, of the first book of the *Prolegomena* is to repeat briefly the Kantian criticism of knowledge, only removing those inconsistencies which were incidental to the first statement of it in Kant.

"Can the knowledge of nature be itself a part or product of nature?" Or, can a subject in whom such knowledge is realised be rightly treated as if he were one of the objects he knows? Can we, *e.g.*, legitimately regard his life as a series of 'modes of matter and motion'? To say that we can, is to commit a gigantic *hysteron-proteron;* for "matter and motion, just so far as known, consist in, or are determined by, relations between the objects of that connected consciousness which we call experience"; and if, in giving an account of either, we try to abstract from relations which exist only for a conscious subject, we will find that nothing remains. How then shall we explain the existence *of* a self by that which only exists *for* a self? The moment this difficulty is really felt, the problem comes to be rather how that which is only as it is for consciousness, should be so often imagined to be a sufficient, or indeed any, explanation of consciousness. The reason is undoubtedly to be found in the twofold aspect in which man is forced to regard himself.

For while there is a "sense in which man is related to nature as its author," there is also "a sense in which he is related to it as its child," and it seems impossible to do justice to the latter sense without sacrificing the former.

In the Kantian philosophy this difficulty is got over by a compromise. Man is supposed to 'make nature,' but not to 'create it'. The understanding supplies the forms by which the matter of sense is brought together in experience and determined as a world of objects, but the matter is given to the mind from without. This compromise draws its plausibility from the fact that it seems to preserve for us the idea of a world which is determined in its own nature, independent of our consciousness of it, while yet it admits the constitutive power of consciousness in relation to that world which exists for us. It does so, however, only by introducing a conception which is found ultimately to be unmeaning; the conception of an object which causes our sensations, but which, in itself, does not exist for consciousness. Kant thus from another side falls into the same difficulty which had led Locke to treat the 'real' or objective element in knowledge as presented to us by, or consisting in, simple feelings or sensations which are given apart from any 'work of the mind' in establishing relations between them. But of such feelings, apart from the relations, nothing can be said. They do not exist either as knowledge, or as conceivable elements in knowledge, and hence they are of no avail in explaining—what they were introduced to explain—that permanent reality which we attribute to things as independent of the process whereby *we* individually come to know them. For what underlies all such attempts to divide the indivisible unity of fact and thought in experience is simply the idea that the real is an unalterably determined order of relations, combined with the idea that consciousness is a shifting succession of feelings. But while we may admit the truth of the former idea, we can find no ground for the latter, except in a confusion between the *existence* of feelings as successive states of a sensitive subject and the *consciousness* of having them—a consciousness which is possible only for a subject which distinguishes itself from them, takes them out of their transitory existence, and fixes them as definite facts, in relation to other facts, in the system of experience. Our feelings, therefore, like external objects, exist for us, *i.e.*, they are intelligible objects for us, only as an element in an unalterable order of relations, which remains unchanged amid all changes in the objects among which it holds, and contains in itself the proximate explanation of these changes. But the con-

ception of nature as such an all-inclusive system of relations is not one that can "stand alone". It requires, to render it intelligible, the idea of something else beyond the beings related—something else which shall combine them together "without effacing their severalty". And such a combining energy can only be an intelligence. We cannot, therefore, separate nature as a system of objects and events from the intelligence for which it exists, as if it were something which first exists by itself and then copies itself on our minds. Rather we must hold that the same principle through which there exists a world to be known, is present also in us, and so constitutes the intelligence through which we know it. "Nature is the system of related appearances, and related appearances are impossible except through the action of an intelligence. . . . Does this then imply the absurdity that nature comes into existence in the process by which this person or that begins to think? Not at all; unless it is necessary to suppose that intelligence first comes into existence when this person or that begins to understand—a supposition not only not necessary, but which on examination will be found to involve impossibilities analogous to those which prevent us from supposing that nature so comes into existence" (p. 38).

If this view of things is true, and if we cannot regard nature as complete in itself apart from a principle of intelligence substantially identical with that which we know in ourselves, then we may fairly argue that man, in so far as such a principle of intelligence manifests itself in him, is not to be reduced to a merely natural existence, a mere part of the natural system. If he were merely a part of it, he could not know it. Or, at least, if we do regard him as a part of nature, we must be using the word 'nature' to express the whole system of related phenomena, *including* the spiritual principle which it implies. And then we must find some other word to express the system of relations *exclusive* of that principle. In any case, we must be careful to observe that a being in whom the spiritual principle, which is the principle of unity in the world, manifests itself, must not be brought under categories, such as the categories of substance and cause, which apply only to those things which are parts of the natural system; nor can he be conceived as an object existing under conditions of time and space in the same way in which they exist. No doubt, as has been already admitted, it is true that there is one aspect of his existence in which man may be regarded as part of the natural system, in so far as his life is "an order of events in time, consisting in the

modifications of his sensibility". But in so far as it is a *consciousness* of these events in a related series (and what we call *our* life—the life of the self—is essentially a life of consciousness), it cannot be reduced to those events themselves, nor can any of its modifications, even the simplest, be accounted for simply as an event in time. This is equally true of *perception*, the function in which consciousness is usually supposed to be most dependent on something else than itself, as of those higher functions of thought and knowledge, in which it seems to be most independent. For perception is not sensation, nor is indeed sensation any part or element of it, though it is the consciousness of *the fact of our having* a sensation in relation to other facts. Its object, indeed, is represented as in time, but just for that reason, it implies and is a consciousness which is not *in* time, but *for* which time is. It is true that "the very consciousness which holds together successive events as equally present, has itself apparently a history in time". "But this apparent state of the case can only be explained by supposing that, in the growth of our experience, in the process of our learning to know the world, an animal organism which has its history in time, gradually becomes the vehicle of an eternally complete consciousness." What is called the history of our consciousness is the succession of feelings which, *as* parts of our consciousness, are taken out of their succession and fixed in reference to a subject which is not one of them, and which, therefore, has properly no history. Hence, if we talk of man's intelligence as a cause, we must call it a "free cause," a cause which does not depend on some other cause for being what it is, which cannot be externally explained like an event or object, which is what it is through other objects or events. In other words, we cannot transfer the term 'cause' "from the relation between one thing and another within the determined world, to the relations between that world and the agent implied in its existence," without observing that, in the latter case, what is before us is not an external relation of one thing to another, but a correlation of elements which imply each other. "There is no separate particularity in the agent on the one side, and the determined world as a whole on the other, such as characterises any agent or patient, any cause or effect within the determined world"; for "the world has no character but that given it by this action; the agent has no character but that which it gives itself in this action" (p. 81). This which is true of the spiritual principle of all things, is equally true of man in so far as spiritual life—the life of intelligence—is developed in him. Nor are we to take this

as meaning that his life is in part spiritual and in part natural, for, though natural processes do in a sense condition his life, yet, as mere natural processes, they form no part of it. In the first place, the very functions which would be merely natural "if they were not organic to an end consisting in knowledge, just because they are so organic, are not in their full reality natural functions. . . . For one who could comprehend the whole state of the case, even a digestion that served to nourish a brain which was in its turn organic to knowledge, would be essentially different from digestion in an animal incapable of knowledge." And, in the second place,—what is more important,—nothing can come within the circle of self-consciousness, which is man's proper life, without being determined by it; nothing is *for* him, which is not *by* him. And, therefore, his existence as a "free cause" is not affected by the processes of animal evolution by which his physical existence may have been developed. "If there are reasons for holding that man, in respect of his animal nature, is descended from 'mere' animals—animals in whom the functions of life and sense were not organic to the eternal or distinctively human consciousness—this does not affect our conclusion in regard to the consciousness of which, as he now is, man is the subject, a conclusion founded on analysis of what he now is and does" (p. 87).

Having thus, in the First Book, secured his ground in the "metaphysics of knowledge or experience," the author, in the Second Book of the *Prolegomena*, proceeds to treat of the "metaphysics of moral nature," and in this sphere he guides himself by the same principles. As he has shown that the sensational conditions of knowledge do not affect its nature as the product of a self-conscious intelligence, so now he seeks to prove that the fact of our action being conditioned by impulses does not affect its character as self-determination. As perception is different from sensation, so is the desire of a wanted object different from an impulse based upon animal wants. An animal want cannot become a *motive* of action for us, unless "upon the want there supervenes the presentation of the want by a self-conscious subject to himself, and with it the idea of a self-satisfaction to be attained in the filling of the want," (p. 94). Though, therefore, the want is presupposed, it is entirely changed in its character by its becoming an object which a self identifies with its own good. As "life is not a mechanical or chemical process because mechanical and chemical processes are necessary to the living body," so "moral action or action

from motives is not a natural event because natural want is necessary to it". Nor can we even say that the animal want is *part* of the motive, part of what determines the conscious being to action; for, as mere animal impulse, it does not determine consciousness at all. Hence, "our self-determination, even when it has merely animal wants for its content, is not a natural event, determined by other natural events before it". It, like perception and knowledge, is the action of a consciousness which cannot be determined by any cause that does not derive its character and its influence as a motive from that consciousness itself. This is the true sense in which we can be said to possess free-will, as opposed on the one hand to what is called 'liberty of indifference' or action without motives, and on the other to Determinism, the theory according to which man's action is determined by the desire that happens to be strongest. Against the former, it needs only to be pointed out that rational or self-conscious action is always action from motives, and that the question of freedom is, therefore, merely the question whether the intelligence or conscious self is constitutive of its own motives. Against the latter it has to be maintained that a mere desire is not a motive except in so far as it is identified by a conscious subject with itself, *i.e.*, with the good or part of the good in which it seeks its satisfaction, and that, as so identified, it can no longer be compared with the other desires as stronger or weaker. Man is determined by his desires only so far as he makes their object *his* object, or seeks his own satisfaction in them. We may admit that there is a sense in which the common saying is true that a man's action is the result of his character and circumstances. But this does not make him a necessary agent; for the circumstances are what they are for him by the action of consciousness, and the character is the man as he has framed to himself an idea of good, of a universe of satisfactions, in which he seeks to be realised.

Determinism naturally goes with a kind of Nominalism, which begins by denying the reality of any such general powers in man as intellect, will, or desire, except as general names for the separate classes of mental acts, and which naturally goes on to deny the reality of the self as distinguished from these classes. To such a theory it is to be answered that, if the self is nothing real apart from the particular feelings, desires, perceptions, it is equally true that *they* are nothing real except in relation to the one self. Now this self is a centre of unity, to which we refer, on the

one hand, our consciousness of the world as it *is*, and on the other hand, our consciousness of the world as it *should be*—*i.e.*, of a world whose realisation depends on the previously given idea of it. And as mere fleeting sensations are translated by consciousness into a system of related objects so the appetites and impulses are changed by it into a "world of wanted objects," or the idea of a complete good in which there lies a full satisfaction for the self. Thus there is for each conscious subject "a world of feeling, however limited in its actual range, yet boundless in capacity, of which he represents himself as the centre". Every one of our desires, whether their objects be sensuous or spiritual, by being brought together in one consciousness, is determined and modified by the others in a way impossible to a purely animal subject, for which each impulse passes away with its satisfaction. "The conception of general well-being is a medium through which each desire is at once qualified and reinforced by all the rest." Hence we are unable to treat desire as a mere general name for a number of isolated particulars, which externally limit and conflict with each other, but must rather regard it as a unity in which each particular is determined in its relation to the other particulars, *through* its relation to the universal which includes them all. The will is often represented as if it were something like a material object moved by different forces of desire. But if we distinguish it from the desires at all, we must rather take it as the unity which specifies itself in them, yet in all its specification remains one with itself.

And the same principles must also be applied to the separate functions of thinking and knowing on the one side, and of desiring and willing on the other. These are not to be treated as separate activities, which are what they are independently of each other. On the contrary, we must regard them as "two equally primitive and co-ordinate possibilities" of man's being, which "have a common source in one and the same self-consciousness," and which, therefore, mutually imply each other. "No desire which forms part of our moral experience would be what it is, if it were not the desire of a subject which also understands: no act of our intelligence would be what it is, if it were not the act of a subject which also desires." This becomes clear if we consider, in the first place, that there is a general agreement between our intellectual and practical consciousness, in and so far as each "implies a relation between a subject and a world of manifold facts of which it is at first conscious

simply as alien to itself, but which it is in constant prccess of adjusting to itself". In the intellectual life we begin with a consciousness of fact, but the "same self-consciousness which arrests successive sensations as facts to be attended to, finds itself baffled so long as the facts remain an unconnected manifold"; hence it is constantly seeking to make the facts its own, *i.e.*, one with its consciousness of itself, by tracing their relations to all other facts in the "cosmos of experience". In like manner, our will or practical consciousness begins also in a "consciousness of opposition between a man's self and the real world," and is a continuous effort to overcome it "by giving a reality in the world, a reality under conditions of fact to the object which, as desired, exists merely in idea". The activity of the intellectual and practical consciousness thus deals with the same dualism, which they seek in different ways to reconcile, by "taking the world into the self, or by carrying the self out into the world". Furthermore, it may be shown that desire is involved in the process of knowing, and the action of the understanding in the process of willing. Nor can we even say that willing is *more* than thinking, but only that it is a *different kind* of thinking from that which is speculatively directed. It appears, therefore, that the division which we make between the faculties of thought and action, like all the other divisions which we make between particular desires and ideas, must be taken as merely relative, and we cannot talk of these faculties any more than we can talk of the particular desires and ideas as externally determining each other. Or if we do so, we must constantly remember that such language is somewhat misleading, since it is apt to make us forget the unity of the self, which expresses itself in these different ways. For "thought and desire are not to be regarded as separate powers, of which one can be exercised by us without, or in conflict with, the other. They are rather different ways in which the consciousness of self, which is also necessarily consciousness of a manifold world other than self, expresses itself" (p. 142). Intellect, desire, and will, are simply the man thinking, desiring, and willing, "and carrying his whole self with him" into each of his actions.

The Third Book of the *Prolegomena* is occupied with the contrast of the good and the bad will, and with the determination of the moral ideal. All will involves self-identification with an object, and, therefore, the goodness and badness of the will must depend on the nature of the object. But the important point to determine is whether in the case

of the good will the object is external to the activity by which it is realised, and can be characterised independently of it. According to strict Hedonism, the object of desire or will is always pleasure, and therefore, there is no *intrinsic* difference of the good and the bad will. Such a doctrine, however, is offensive to the unsophisticated moral consciousness, and its plausibility is mainly due to a confusion. The undoubted truth, that the individual always finds pleasure in the attainment of the object which he seeks as good, has been supposed to carry with it the consequence that the object sought is itself always pleasure. On the other hand, if we say that there is an *intrinsic* difference between the good and the bad will, we seem to be involved in a kind of circular reasoning. For then it appears as if we should be obliged to explain the good or moral ideal merely as the end of the good will, while yet we have no definition of the good will except that it is directed to the good as its end. This circle is, in a sense, necessary if we are not to give man's moral being an end external to itself, and so reduce it to a mere means or instrument. But it may be at once explained, and, for practical purposes, escaped, if we consider that, though we cannot say man's end is anything else than to realise the faculties of his being as a self-conscious subject, and though we cannot know what these faculties are except from their realisation, yet that from reflection upon that realisation so far as it has gone, we can in a measure estimate both what the faculty is, and what is the direction in which it may be further developed. "We cannot indeed, describe any state in which man, having become all that he is capable of becoming—all that according to the divine plan of the world he is destined to become—would find rest for his soul. We cannot conceive it under any forms borrowed from our actual experience, for our only experience of activity is of such as implies incompleteness. . . . Yet the conviction that there must be such a state of being, merely negative as is our theoretical apprehension of it, may have supreme influence on our conduct, in moving us to that effort after the Better, which, at least as a conscious effort, implies the conviction of there being a Best" (p. 180). This view must, however, be taken in connexion with the general conception of man's life, previously developed, according to which "as our knowledge, so our moral activity was only explicable on supposition of a certain reproduction of itself by the eternal mind as the self of man, a reproduction of itself to which it makes the processes of animal life organic, and which is qualified and limited by

the nature of these processes, but which is so far essentially a reproduction of the one supreme subject, implied in the existence of the world, that the product carries with it under all its limitations and qualifications the characteristic of being an object to itself" (p. 181). For, if this be true, we can understand how the beginning of morality for man lies in his presenting to himself some object in which he thinks that he discerns his 'good,' or the complement of his being; and how it is that, through many deceptions arising from the discordance between *that* which he seeks and that *in* which he seeks it, he is continually coming to clearer insight into the nature of that moral good which alone can satisfy him. From a consideration of the nature of the self to be satisfied we can say that the good, or the object of the good will, must have certain characteristics; it must be permanent, like the self of which it is the satisfaction, and it cannot therefore consist in a series of isolated pleasures that perish with the using, and leave the self not richer, but rather poorer. It must be a good which is realised in persons, and is inseparable from their self-consciousness, as that in which alone a divine self-consciousness can reproduce and express itself. It must be a social life of persons, since "social life is to personality what language is to thought," and it is only in participating in the life of a community, that the individual in spite of his finitude, can realise the infinite possibilities of his nature. Nor must these persons be conceived as passing phenomena of a general life of humanity, which uses them as its vehicles, but is not realised in them; for, "to speak of any progress, or improvement, or development of a nation or society or mankind, except as relative to some greater worth of persons, is to use words without meaning" (p. 193). Finally, as there is no realisation or development in a process *ad infinitum*, a process not relative to an end, we must conceive that neither the persons, nor the good realised in them, can ever pass away. "On the whole, our conclusion must be that, great as are the difficulties which beset the idea of development when applied to the facts of life, we do not escape them, but empty the idea of any real meaning, if we suppose the end of the development to be one in the attainment of which persons—agents who are ends to themselves—are extinguished, or one which is other than a state of self-conscious being, or one in which that reconciliation with the claims of persons as each at once a means to the good of the others and an end to himself,

already partially achieved in the higher forms of human society, is otherwise than completed (p. 199).

When we try more definitely to describe the end, or still more to draw from it particular precepts for moral conduct, we seem at first to be reduced to a standstill. For there are, properly speaking, no special rules of morality, which hold good *absolutely*, or which are not liable to modification from the further development of human capacity. Are we then to fall back on the tautology that the unconditioned moral imperative commands us only to obey the unconditioned moral imperative? Practically, this difficulty is met by the fact that there is a certain established order of morality, a certain code of 'respectability,' in which the good has already expressed itself, and which is to be regarded as unconditionally binding, as against any mere desire for pleasure or aversion from pain; as in short unconditionally binding against every desire, except that "desire for the best in conduct" which has produced the present code, and will from time to time suggest its improvement. Further light may be had by considering the development of this code in history, in view of what has already been said of the nature of the self-consciousness which is the subject of development. In its earliest form, the moral end appears as some permanent social well-being of persons, which may be conceived in a very external and material way, and may be limited to a narrow circle of individuals, but which still bears in it recognisably the general characteristics of moral good as already described. This first form is gradually changed, both quantitatively and qualitatively, by the enlargement of the area of persons included within the social bond, and by the deepening and purifying of the idea of good, in which satisfaction for these persons is sought. These two processes are interdependent, for the true good can be found only in that in which rivalry is impossible, and the consciousness of such a good can reach its purest form only when men have recognised each other as members of one all-embracing community. Thus we find the area of justice and of charity gradually extending from the family to the nation and to humanity, and at the same time the idea of good rising from being to well-being, and from all kinds of outward good to the intrinsic qualities of soul which are exercised in their attainment or enjoyment. The decisive turning-point in this latter respect may be found in the philosophies of Plato and Aristotle, writers to whom mainly we owe two great steps in the moral culture of mankind. For they first gave a general

systematic view of the qualities of the virtuous life, and they also first distinctly expressed the idea that it is in the development and exercise of these qualities, and not in any extraneous end, that the good of man consists. The results of this effort of Greek speculation were permanent. For, notwithstanding all that subsequent deepening and widening of man's moral life which has been the result of Christianity and other influences, the general principle of morality must still be expressed in the form in which it was first brought to a consciousness of itself in Greece. "And when we come to ask ourselves what are the essential forms in which the will for true good (which is the will to be good) must appear, our answer follows the outlines of the Greek classification of virtues. It is the will to know what is true, to make what is beautiful, to endure pain and fear, to resist the allurements of pleasure (*i.e.*, to be brave and temperate), if not, as the Greek would have said, in the service of the State, yet in the interest of some form of human society; to take for oneself, to give to others, of those things which admit of being taken and given, not what one is inclined to, but what is due" (p. 276). In what follows this quotation, the author has illustrated this view—in some of the most striking pages of the volume—by a detailed consideration of the virtues of courage and temperance, showing how the Aristotelian ideas of these virtues have been purified and widened in modern Ethics without losing their fundamental identity.

The general result of this Book of the *Prolegomena*, in the analysis of which we cannot here proceed further, is to show that there is an ideal of good bound up with the consciousness of self, and involving the consciousness of other selves as partaking in one common life, which grows with the individuals partaking it, and with which they grow. This ideal is present and implicit in the first practical self-consciousness of man, in so far as he is not driven into action by wants like the animals but directs himself by motives, *i.e.*, by ends which he sets before him, and in which he seeks to realise and satisfy himself. He seeks objects only as he subsumes them under the idea of good, and the first objects which he so subsumes are always inadequate to the idea. Hence, by partial disappointments and partial satisfactions, he is gradually awakened to a consciousness of himself and of the good he wants. Growing self-consciousness makes him seek higher objects, and higher objects bring clearer self-consciousness. The most critical turning-point in this progress is that in which the adequate end of the social

community is recognised as no other than the development of mind and character in the self-conscious beings who are its members. And the end—so far as we can think of the end—must lie in the widening of the community to all self-conscious beings, and the elimination of all activities except those in which the good of one is the good of all the others.

The Fourth and last Book of the *Prolegomena*, which we must notice very summarily, is devoted to the question of the practical value of Moral Philosophy. It begins with discussion of the value of having a moral ideal, and especially of that self-questioning as to motive, which is commonly called conscientiousness, and which involves the comparison of self with such an ideal. What, in other words, is the value of conscious and reflective, as opposed to what is called unconscious, morality? "A man's approach to the ideal of virtue is by no means to be measured by the clearness or constancy of his reflection upon the ideal." There have been many benefactors of humanity who have improved and elevated man's life, but who have been absorbed in their schemes for the bettering of men's estate almost to the exclusion of all reflection upon their own motives. At the same time, the highest moral purity cannot be attained without those searchings of heart which arise from the humbling yet elevating comparison of ourselves with the highest ideal of virtue. Nor can we separate this purifying of motive from the outward efficiency of effort after particular goods, though it may not be always easy to trace the connexion between the improvement of action and elevation of the character of the motives. It is somewhat perplexing to see what seems to be great efficiency for ends in themselves good, going along with mean motives; but in most cases, this only means that selfishness has found its account in making itself the instrument of something higher than itself. And the real originative power of a moral act is probably, if we could see the whole, exactly proportioned to the purity of its motive. While, however, it may be allowed that the purification of motive is as real a part of moral progress as the performance of outwardly good actions, and that reflection is the necessary instrument of such purification, this does not yet carry with it the practical value of the kind of reflection which is involved in the establishment of a moral theory. And, indeed, if practical influence be claimed for this kind of reflection, yet it must not be estimated too highly, at least if we mean by that *direct* influence. In the main, the work of moral theory must be defensive.

Reflection in this sense is needed mainly to heal the wounds of reflection itself—to save men from the dangers of that kind of sophistication by which intellectual doubt aids in weakening the moral force of resistance to passion. Nor is it easy to get from any theory the means of directly determining cases of moral difficulty (such as that of Jeanie Deans in the *Heart of Midlothian*) when what is in itself a good impulse comes into conflict with the ordinary rules of morality. In the face of such an emergency, moral decision must necessarily be the intuitive expression of character. Still a true moral theory may aid in the formation of a character which will make the right decision possible. It may do this service in a reflective age by enabling men to recognise the essential truth of the imaginative forms in which the moral and religious consciousness has to express itself. It may also help to solve casuistical difficulties which arise from the conflict of different authorities which have a traditional claim upon our respect, by making us reflect on the real basis of such claims in the moral consciousness which all these authorities partially express.

The last two chapters of the *Prolegomena* contain a comparison of the hedonistic theory with the theory of the good as consisting in the perfect actualisation of human capacity, in relation to their respective *practical* influence. It is pointed out that the hedonistic criterion was useful in the hands of Bentham, because he insisted so strongly on the *equal* claims of all to a share of happiness, and not because he defined happiness as pleasure. The nature of the reforms which he was mainly concerned in urging did not make it necessary to have any very exact definition of the nature of happiness. Such a definition, however, it is maintained, becomes necessary when we advance beyond the broad legal aspects of conduct. And in connexion with the proof of this, Mr. Sidgwick's theory (which admits that reason is so far constitutive of motives as to generalise the desire of pleasure and bid us seek it for all and not for self) is carefully criticised. In opposition to this theory, the author repeats his argument that the good, as the end determined by reason, is not only quantitatively but qualitatively distinguished from the end determined by sensuous feeling. And the book ends with the guarded conclusion that in those not very numerous cases where a criterion is wanted "for estimating those claims upon us which are not enforced by the sanction of conventional morality," such a criterion "is afforded by the theory of ultimate good as a perfection of the human spirit resting in

the will to be perfect (which may be called in short the theory of virtue as an end in itself) but not by the theory of good as consisting in the maximum of possible pleasure".

The very imperfect outline which has just been given of a volume so rich in matter, cannot do more than indicate its general line of argument. The points in which probably the greatest originality and freshness of remark will be found, are the discussion of the nature of will in the Second Book, the account of the development of the ethical ideal in the Third Book, particularly the comparison of Greek and modern ideas of virtue, and the fine and subtle ethical observation shown in the sections on purity of motive and on casuistical difficulties, in the Fourth Book. The strong practical insight of the author into the difficulties and furtherances of the spiritual life is shown in almost every page, and is the feature which distinguishes this from most of his previously published writings. It is a book which is not easy to review for any one before whom it brings so vividly, even in the peculiarities of phrase, the constant self-questioning fairness and unwillingness to pass over any difficulty which were characteristic of the writer. Whether it will carry conviction to those of another way of thinking, it may be difficult to say. But we think that no attentive reader can fail to be struck with the singular desire to give full justice to every opponent, and the absolute avoidance of anything like harsh or polemical expression, which are its characteristics.

We shall only make one criticism. The method pursued in the investigation of the moral ideal may be described as that of Aristotle modified by Kant. Following the latter, the author asks what are the conditions of experience, and especially of moral experience. But, like the former, he takes his start from the concrete moral experience reached in the social community of the family and the state. And as this ethical experience is not, as by Aristotle, taken to be completed in the definite form of a municipal state, which once for all has exhausted the moral capacity of man, but is viewed as still in process of being realised in a growing community which is gradually learning to recognise the claims of all self-conscious beings, so the ethical ideal is seen to involve a far more thorough transmutation of the natural man, a far stronger demand upon the individual to die to his lower self that he may live to the higher self and to mankind, than could be recognised by an ancient philosopher. At the same time, the author, while, like Kant,

he bids us reason backwards from our intellectual and moral experience to that spiritual nature in which lies the possibility at once of knowledge and of moral action, is also like Kant in refusing to say much of that spiritual nature in itself. That "the source of the categories cannot be brought under the categories," and that the moral acts in which the self is realised cannot be treated as natural events, he maintains with great force of argument. But he is unwilling to go much further—either in the direction of speculation about the nature of the self-conscious principle to which he has referred all things, or in positively working out any view of nature and human history as the manifestation of spirit. In regard to the theoretical aspect of the subject, after pointing out that reality is that which exists for a thinking consciousness, he adds (p. 54), "as to what that consciousness is in itself, or in its completeness, we can only make negative statements. *That* there is such a consciousness is implied in the existence of the world, but *what* it is, we can only know through its so far acting in us as to enable us, however partially and uninterruptedly, to have knowledge of a world or an intelligent experience." And in a similar sense, speaking of the practical ideal as the realisation of human capacity, he declares that in its completeness we cannot say *what* it is. "We cannot conceive it under any forms borrowed from our actual experience, for our only experience of activity is such as implies incompleteness. Of a life of completed development, of activity with the end attained, we can only speak or think in negatives, and thus only can we speak or think of that state of moral being in which, according to our theory, the ultimate moral good must consist" (p. 186). This language will probably seem to many to be at variance with some of the results subsequently arrived at by the author himself as to the nature of the moral ideal as determined by the idea of the self. And it seems to be inconsistent with the value which is assigned to the Platonic and Aristotelian criticism of morality, as not only enabling these philosophers to understand the life of Greece, but to lay a basis for a universal morality. It is true that we cannot explain the spiritual principle, which is implied in all explanation, by reference to anything else than itself, but this does not imply that we only know *that* it is, and not *what* it is. Our knowledge of the self is rather the type to which all other knowledge imperfectly approximates, than an inferior kind of knowledge. And, on the other hand, if it is possible for us to carry back the world of experience to conditions that

are spiritual, there seems to be nothing that should absolutely hinder us from regarding the world *positively* as the manifestation of spirit, and from re-interpreting the results of science by the aid of this idea,—however difficult it may be to realise satisfactorily such an idealistic reconstruction of science. And in like manner, if it is possible to carry back our moral life to its conditions, and to regard it as the realisation of the self, there seems to be no absolute hindrance in using this idea positively, not only as a key to the history of the past, but also to determine, in outline at least, the idea of moral perfection. Nay, it seems as if this volume, even in view of its own disclaimer, was itself a proof that this result can be in some measure realised.

EDWARD CAIRD.

V.—NOTES AND DISCUSSIONS.

IS THERE SUCH A THING AS PURE MALEVOLENCE?

I beg to offer a few observations on Mr. Bradley's Note, in the last number of MIND, relating to the ultimate analysis of our malevolent dispositions. It would be as agreeable to me, as it is to him, to be able to believe that there is no such feeling in the human mind as the delight in pure malevolence.

I should have been saved the necessity of some repetition, if Mr. Bradley had disposed, *seriatim*, of what I consider the least ambiguous cases of pure malevolent pleasure; as, for example, in Mr. Stephen's critic of a sensitive poet. Or to take a still wider-ranging class—the delights of teasing, so well developed in our earliest years: he does so far recognise these as to call them by other names, but it remains to be seen how far the case is improved thereby. Certainly nothing could well be more diabolical than the conduct of boys at school to the new entrants; similar conduct being reproduced on the entry into trades and professions, as the army. That our most highly-bred youth can behave as we hear they do in such circumstances, sufficiently proves the deep-seated depravity of human nature, and the fact is not made either better or worse, whether we refer it to a natural feeling of malevolence or to certain other roots capable of yielding the same fruit. Still, it is interesting psychologically, and not unimportant in an ethical point of view, to trace out the real foundations of the bad side of our nature. The suitable modes of remedial treatment may perhaps depend upon the correct analysis of the evil.

My strong cases, in addition to those just quoted, were,—temper or angry passion generally; the delight in seeing punishments; laughter, comedy and humour; sensational crimes as recorded in history, or worked up in romance, including the pleasures of tragedy. I should add the prominence given in our newspapers to disasters and horrors of every kind. I may also have to remark on the gratifications of sport.

Let us first state to ourselves the bearings of malevolence in its widest compass: as including the infliction of suffering, the destruction of life, and the deprivation of active power more or less, as in reducing to bondage or subjection. In every one of these forms of injuring others, we can take a strong positive delight; greatest of all when done by our own hands, but yet great when merely viewed as done by any other agent.

Of the various explanations given as substitutes for the hypothesis of a pure pleasure of malevolence, I have to remark generally that they are all affected with vagueness or ambiguity; so that we have first to reduce them to definite statements.

Perhaps the most plausible of the alternatives is the feeling of retaliation for wrong inflicted, in other words, genuine and legitimate Anger. This takes us back to the early struggle for existence, where, if anywhere, we ought to find the sources of our malevolent dispositions such as they are. That life-long struggle could not be carried on without baffling, disabling, and maltreating other creatures. One section of the animated beings around had to be attacked as prey, another section as standing between us and our wants. That, in such a situation, pleasurable associations should be formed with all the signs of discomfiture in sentient creatures, seems quite inevitable. But we are not in a position to estimate the probable strength of those associations, nor their persistence, as a large pleasurable susceptibility, in the altered circumstances of civilisation. We must endeavour to analyse the case as now presented to us.

To be pained and wronged is the common source of angry feeling. The ordinary operation of the will would be to rid us of the pain, to prevent its recurrence, and also to obtain such reparation as to place us as nearly as possible in our original condition. One form of reparation is the undoubted satisfaction of inflicting an equal, perhaps a greater, amount of pain on the offender. As Mr. Bradley expresses it, we identify our loss or suffering with the happiness of another, and are therefore urged to remove that happiness. All this is the common course of the will, in using known means to accomplish an end, namely, the conservation of our own happiness. Our action in the matter should exactly correspond to the requirements of the case, and no more; indeed, it ought to be wholly devoid of passion. If we do not at once succeed in regaining the *status quo*, we record a debt against the party, and determine to recover it on the earliest opportunity.

Such, however, is not the course of anger, in our actual experience of it. There is usually an amount of passionate excitement, with the accompanying exaggerations of strong feeling. There is a tendency to gloat over the occasion, to feast upon it, by virtue of some source of luxurious susceptibility that lies within us.

I can partly account for the mere exaggeration of the irascible feeling, by invoking the element of Fear. When we are unexpectedly wronged or injured, we consider not only the present but the future. When our house is for the first time attempted by burglars, we lose our sense of immunity, and are filled with alarm; the effect being to induce exaggerated precautions of every sort. So in rectifying ourselves against a deliberately inflicted harm, we are not satisfied with a moderate and calculated retaliation: our tendency is to go considerably beyond the limits of sobriety and rationality, especially with the view to future prevention.

As yet, however, we get no special insight into the origin of our pleasure in the suffering that we cause by our retaliation; nor does even the exaggeration of preventive effort account for the peculiar sweetness of the revengeful feeling. To study this in its

purity, we must refer to the instances where the harm done is but small, easily rectified, and involving no serious apprehensions. Now, the irascible temperament is shown in taking offence at mere trifles; in resenting out of all proportion to the offence and the danger. A slight affront, a small money-loss, involving no ulterior consequences, a slight trespass, will induce in some minds a fierce retaliation, and perhaps a lasting and incurable resentment.

There are two ways of representing the pleasure of revengeful feeling. The mode that seems to me to square best with the whole of the facts, is to regard it as the genuine pleasure of malevolence drawn upon by way of *solatium* for the original pain and injury. The other mode is to regard it as the simple and proper outcome of the sense of wrong, with precaution for the future; the pleasure lying in the security achieved by the suffering, the subjection, or the death of the wrong-doer.

It is not easy to obtain an *experimentum crucis*, as between the two views. The second, however, is open to an obvious remark. The outgoings of revenge have, in all ages, greatly exceeded the reasonable protection of the injured party; so much so, that the sufferings inflicted in the name of revenge would not have been greater, even on the supposition of an independent delight in suffering. So long as revenge is excessive and cruel, what does it matter whether it be due to pure malevolence or to a grossly exaggerated view of the necessities of our protection? If mankind can habitually give way to such exaggerations, we have all the evil that the disinterested pleasure in suffering could inflict.

But the case of revengeful passion is not the best for trying the question at issue. There being always present a reason or pretext for the misery caused, we are not sure that the mind delights in misery as such. Let us take then the examples where we are witnesses to suffering inflicted by others, and where we ourselves are noways concerned, or at all events very remotely. Why do multitudes delight in being spectators of punishments, including the gallows? In former days, when executions were public, when whippings, the pillory, and the stocks were open to everybody's gaze, what was the source of the fascination attending the spectacles? They were remotely connected with the security of people generally, but they were most frequented by those that thought least of public security. I have no doubt that if military floggings had been exposed to the public gaze, they would have been very largely attended; while the attraction could, on no pretext, be said to consist in the satisfaction of preserving military discipline, and securing the nation against foreign attacks. There is a fascination in witnessing school-punishments, even when everyone feels liable to be a victim in turn. The pleasure of a mere spectator here can have no bearing upon any future protection, unless the offence happen to consist in annoying the pupils generally.

We can go a step farther. There are abundance of examples

of delight in mischief of the most absolutely gratuitous kind; beginning in tender years, and continuing more or less until maturity. The love of teasing, of practical joking, of giving trouble and annoyance, without any cause whatever, is too manifest to be denied; while to bring it under retaliation requires an enormous stretch of assumption. The midnight revels of youthful spirits have been known in all ages; they have no bearing upon the security of the actors, except to put that in peril, by an example that is to recoil upon themselves some time later.

When this last class of cases is brought up, the opponents of the theory of pure malevolence take other ground. Retaliation is plainly inapplicable. The explanation next resorted to, is Love of Power: on which, the remark may be repeated, that if love of power conducts us to such extremities of unprovoked cruelty, it is to all intents and purposes a principle of malevolence. We must, however, trace the workings of Power more minutely. It is by no means a simple motive. Power is sought very largely for its fruits and consequences. It brings us many of the ordinary gratifications of life, and saves us from numerous evils. So far well; but what has the gratuitous infliction of suffering to do with Power? The answer is somewhat complex.

For one thing, it is a test or evidence of the possession of power. We cannot put another being to pain, without having in some way the advantage or superiority. In point of fact, however, the operation is almost always unnecessary for the end in view. In nearly every case, we know perfectly well what is the extent of our power; and, indeed, without that assurance to begin with, we seldom venture upon tormenting anyone. The process of teasing and annoying others is, therefore, not to give a proof of our power, but to turn that power to account in furnishing us with a gratification distinct from power. What could a Roman Emperor gain, in the way of confirming his sense of power, by having an animal tortured to amuse his evening-meal?

But, in the second place, the operation of inflicting suffering is one of the ways of losing power. By setting loose the desire of retaliation in the injured person, we make an enemy; and even if we can disable our victim, we are not out of danger; there may still be friends and sympathisers, whose resentment we have henceforth to endure. Unless the received principle—that beneficent action tends to multiply itself—be a delusion, influence over other beings is more effectually gained by serving them than by hurting them. Those persons that delight most in giving pain, have often to confess that it has been a losing game in the end. Milton is near the truth in saying—

> "Revenge, at first though sweet,
> Bitter ere long back on itself recoils".

Cases where power is gained by inflicting pain do indeed occur, but if the law of benevolent action holds, they are the exception

and not the rule. We cannot always put a check upon tyranny, but we are perpetually striving after a state of things where it shall not be profitable to inflict gratuitous suffering upon anyone. Even as things are now, there must always be a sense of danger attending cruel practices. Yet the freeing of ourselves from apprehensions and fears is one of the most relied-upon explanations of our malevolent propensity.

Another phrase introduced into the handling of the question is Self-assertion. We are said to assert ourselves with peculiar emphasis when we can put another person to pain. No doubt this is so. As already remarked, it is a very good proof of our being the stronger party. Nevertheless, it is not essential in order to give us that proof. We have many other ways of completely satisfying ourselves on that head, without inflicting any more suffering than is implied in the very fact of inferiority. If we choose this one way, out of all possible ways of self-assertion, it must be from set preference, arising out of the gratification attending it in particular. Self-assertion is a wide-ranging fact. In the one extreme, it implies claiming our own just rights, without a particle of encroachment on other persons' rights; in the other extreme, it goes the length of reckless grasping at everything within reach. He that proceeds on the first plan, is not in the mood for causing anyone to suffer needlessly; his only possible gratification would be to see the suffering of a thief, a burglar, or a swindler, in their disappointment at being thwarted. The self-assertor of the other type is of course pleased at any suffering that attests the success of his nefarious designs. He would not, as a matter of course, enjoy the suffering of parties entirely unconnected with his schemes. He would have, in the first instance, to take a very broad view of his position. Knowing that in asserting himself by injustice and crime, he becomes the enemy of the human kind, he might come to feel that no man was entirely indifferent to him; that the suffering of others, whoever they might be, was in the line of his advantage. Nay more, he might consider that his position required him to cherish the taste for suffering to the uttermost corners of sentient life; so that the torture of the most insignificant insect would come within the scope of his delight. In short, he must first become a devil, in order to attain the pure pleasure of malevolence through the medium of self-assertion. Mr. Bradley admits that self-assertion does not lead to the infliction of pain as such; and I quite agree with him. But I ask, why then does he adduce it by way of accounting for the facts? If I understand his argument, it seems to revolve in a circle. In order to account for the admitted facts, he brings forward such alternative explanations as love of power and self-assertion; but finding that these do not carry him far enough, he draws the inference that there cannot be such a thing as pure malevolence.

I must take particular notice of what he adduces by way of

confirming his explanation or no-explanation, founded on power and self-assertion. He says, correctly enough, that "torture inflicted by a third person, who is not our agent, lacks a certain element of pleasantness. No doubt we here may sympathise with the torturer, and so get pleasure; but a tyrant, speaking generally, would care little to see the cruelties of a neighbouring tyrant. The malevolence which would take delight in the quiet and passive starvation of the unoffending, would be an abnormal product." I agree in part with these remarks. It is quite certain, that the pleasure is at a maximum when we ourselves are the actors. The delight in exercising power or superiority in any shape is undoubtedly genuine and great; to produce any effect that, when produced, comes home to any of our agreeable susceptibilities, is intrinsically grateful. But here comes the pinch. The pleasure of the sight of suffering is so decided that it counts for an important standing item of enjoyment with the mere spectator. To take pleasure in the starvation of the unoffending is an abnormal product, in this sense, and this sense only:—certain modes of suffering, such as the starvation of the unoffending, grate upon our cultivated sympathies, and are objectionable on that ground. With nothing more abnormal than dulness of sympathy, which is so abundantly exemplified in the history of mankind, the starvation of any number of unoffending creatures, would be extremely enjoyable. The sight of physical torture is as bad as starvation, if not worse, and that has given ecstasy to millions. The reader of the ethical volume, in Samuel Bailey's *Letters on the Mind*, may remember an anecdote, quoted by him, of a man accidentally drowning in the presence of a multitude of lookers-on, who watched with exquisite satisfaction every turn of his writhings and struggles, and, when he sank, gave forth a shout of exultation. The man was a stranger, and had done them no sort of harm.

I read lately an extract from a book entitled *Siberian Pictures*, describing a scene still more revolting. It was prefaced by the general remark that the natives of Siberia have not risen to sympathy with the lower animals. The scene was this. A number of boys had suspended a dog by the hind legs over a fire to roast it slowly to death and enjoy the spectacle of its agonies. The traveller remonstrated. He was answered readily by the boys, that the dog did not belong to him. Some of the parents witnessing the interference soon came up, and told him in still more emphatic terms that the boys were doing what they had a perfect right to do and warned him to depart. The delight of the boys was genuine and intense; it could in no sense be referred to vindictiveness. It might be called love of power, but the direction taken by the sentiment would seem to show more than the pleasure of mere power. It was not necessary for self-assertion; the dog was wholly incapable of contesting any claims or privileges that the boys might be supposed to be vindicating. The traveller's

remark as to the undeveloped sympathies of the population towards animals, is the one in point. The delight in suffering is apparently natural and primitive. It comes into conflict with our sympathies such as they may happen to be; so far as these reach, it undergoes restraint; beyond their range it manifests itself in purity.

I must next advert to the love of Excitement as a possible means of accounting for the fact. There is considerable vagueness in the term "excitement". We may be pleased, or pained simply; and we may be in a state, not describable as either pleasure or pain, called excitement. A surprise is a good example of excitement, with neutrality as regards pleasure or pain; for although these may accompany surprises, they are incidental, and not essential, to the state. Another variety of excitement is seen when we are either pleased or pained, but not at all in proportion to the mental agitation or the intensity of our consciousness. Great pleasures are apt to subside before the agitation of mind subsides, hence the propriety of having such a term as "excitement," in addition to the terminology of pleasure and pain.

Now it is quite correct to say that we court excitement, as a relief from dulness or ennui, or as a diversion from low spirits. We may not see our way to pleasure pure and simple; but if we can only get excited with something, we may thereby get into a pleasurable mood. To agitate the nerves anyhow (not painfully) may chance to bring some pleasure, if only of the organic sort. We quit a scene of depressing stillness, for the bustle of a street, a market, a crowd; we call that excitement, to be within the mark; we are not quite sure that it amounts to pleasure. There are conflicting currents, pleasant and painful: we scarcely know which is in the ascendant; at all events, we are made more awake, or alive; our nerves and muscles have got an accession of activity. Gambling is a good example of pleasure from excitement. It contains alternations of proper pleasure and pain; but there is a high pitch of excitement throughout.

The demand for excitement of itself proves nothing. What we are to look at is the forms that it takes by preference; inasmuch as these are probably something more than mere excitement; they involve real and unambiguous pleasure. If the votaries of excitement are in the habit of seeking it by molesting, annoying, chaffing other people, the inference is that the excitement is a mere cover for a definite pleasure, the pleasure of malevolence. To sit on a road-fence, and pass insulting and jeering remarks upon the innocent passers-by, is not to be slurred over as mere love of excitement; it rises from the deeper fountains of malignity. We may easily procure excitement in forms that hurt nobody; we may even find excitement, and pleasure too, in bestowing benefits; when we habitually seek it in the shape of inflicting pain, we must be credited with delighting in the pain.

I reserve to the last the special discussion of the Ludicrous, which, I believe, confirms my view, with the least scope for

evasion. I could not, for any amount of bribe, explain the pleasures of Comedy and the Ludicrous without assuming a disinterested pleasure of malevolence. I must examine Mr. Bradley's observations on this head, with some minuteness.

In the first place, Mr. Bradley will not admit that the Comic is everywhere reducible to a perceived degradation. In the next place, he holds that degradation is very far from establishing malevolence. Degradation must imply a degrading *power*, and our pleasure would lie in thus feeling our self-assertion increased. Moreover, Mr. Bradley thinks that I should "find it difficult to verify the presence of malevolence in every species of tne ludicrous". No doubt I should, but that does not dispose of the question between us.

I will notice first the connexion between the ludicrous and degradation. Mr. Bradley does not go the length of denying this wholly; he merely says that it does not exist *everywhere*. I should like to know whether he admits it *anywhere*, and, if so, to what extent. Are the cases so few as to be mere chance coincidences, or so numerous as to go beyond chance, and yet not amount to a general or prevailing connexion? I think the history of Comedy is dead against him, if he means to say that degradation is no essential feature of it. The ancient critics judged differently. Quintilian had perused all the great productions of Greek and Roman Comedy; and from him, we have this observation: "A saying that causes laughter is generally based on false reasoning (some play upon words); has always something low in it; is often purposely sunk into buffoonery; *is never honourable to the subject of it*". This is pretty sweeping; indeed, a little too sweeping. I could undertake to produce considerable exceptions; some of them, however, would but prove the rule; and all of them taken together would fail to invalidate it as a general truth. The reason why such wide generalisations are not absolute and universal, is simply that they are occasionally crossed by other principles that turn aside their application in particular cases. Thus, a laughable saying may be even honourable, by being the occasion of a still greater compliment. Many people that are ridiculed in Comedy, are pleased by the importance of being publicly mentioned. Then, the causes of laughter are not exhausted by comic degradation. It often accompanies mere good spirits, and the cordiality of friendship. There will always be cases even of the genuine comic too subtle to analyse to everybody's satisfaction. But that Comedy from its first start in the Dionysiac processions, down to the present hour, is in its very essence the degradation of some person, or interest, or institution, is established by an overwhelming preponderance of examples beyond the possibility of cavil. Mr. Bradley thinks he refutes the position by remarking that degradation must imply a degrading *power*, and that in such a case any pleasure would lie in an increase of our self-assertion. I can scarcely make out from this whether he is admitting or

denying that degradation is the cause of laughter; the expression might mean that there is degradation, but the pleasure is the pleasure of our own power, or self-assertion, and not the pleasure of seeing another person degraded. The answer to this has been partly anticipated, but is not complete. An important consideration remains.

All through his argument Mr. Bradley keeps in the background, or, I may say, all but suppresses, the fact in connexion with the pleasure of the ludicrous that is most at variance with his conclusions. It is this. While, in a few instances, our pleasure is in part the self-consciousness of our own power, these instances are but a drop in the ocean of our enjoyment of ludicrous degradation. Aristophanes must have had an exquisite pleasure in the exercise of his gift of comic degradation. But how many have been delighted even to ecstasy with his comedies, whether as seen on the stage, or as read! Our pleasure in the ludicrous goes far beyond any power of our own; it is coincident with felicitous mockery however originating. We enjoy our own jokes with a special unction; but we enjoy also the jokes of the wits of all ages. The collective comic literature of the past counts for a large fraction of our happiness; it is, like music, one of the institutions that make up the salt of life. Yet the creators, who alone had the pleasure of power or self-assertion, are a mere sprinkling; they can be counted by tens. In fact, to put the phenomenon in its just light, we must leave these out altogether, and deal with the millions whose enjoyment of comic degradation is intense, and who are nothing more than spectators. Mr. Bradley says that torture inflicted by a third person lacks a great element of pleasantness. Very true, but a great element still remains; and that element, in the case of the ludicrous at least, is one of the substantial and enduring pleasures of mankind.

The bearings of this remark are not yet exhausted. I must apply it to Mr. Bradley's second position, namely, that although the comic were everywhere reduced to degradation, that is very far from establishing malevolence. I answer that degradation is undoubtedly pain to the subject of it; and to take pleasure in seeing (and not merely in bringing about) degradation would *primâ facie* indicate pleasure in putting others to pain. If we are not to admit this conclusion, we must find another way out of the puzzle. Power and self-assertion are of little avail, in the case of mere spectatorship; all that could be said is, that we sympathise with A's elation of power in putting B to pain; but such a mixture of sympathy and cruelty is not to be readily assumed. Then, again, we have the alternative of love of excitement, but with a difficulty, as already noticed, in showing why the desire for excitement should run so often and so largely in this particular channel. Take a familiar instance: the pleasure of children (and not of them alone) in the pantomime; which pleasure reaches its acme in the afterpiece. While looking up with admiration and

envy to the prowess of the clown, the youthful spectators have an intense enjoyment in seeing how he puts everybody to trouble, annoyance, and discomfort, while eluding detection, and escaping all the perils of his venturesome occupation. Even poetic justice is not allowed to overtake him at last; the idea would be most distasteful to his young admirers. Excitement might be given in other ways; but would any amount of mere glitter and stage movement possess the unction of the clown's successful career in diffusing petty vexation all around him?

The strongest point in the illustration from the ludicrous is the very large amount of the pleasure arising from a comparatively slight class of pains. No doubt a loss of dignity affects us considerably; yet, in the scale of inflictions it stands low: bodily injury, loss of means, an ill name, sorrow for bereavements, danger to life,—leave the suffering of a temporary loss of dignity at a great distance. Anything that gives an acute annoyance, without serious injury, is included among the incidents productive of laughter; such, for example, as a malodour, an unexpected check to one's progress, awkwardness and failure in some performance, or any small disappointment. These are pains that we can take delight in seeing any one suffer, even though we have no hand in causing them. If our delight in the greater pains were in proportion to their magnitude, the charm of seeing creatures in the extreme of bodily agony would be something enormous. And so it is, in certain circumstances. Our sympathies usually interfere with our enjoyment in the worst forms of suffering; but there are modes of getting over sympathy; the chief being resentment for injury, which suspends fellow-feeling for the time, and gives our malevolent gratification full swing. Why have punishments so often been accompanied with extreme barbarity and cruelty? Putting a man to death ought to be a full discharge of any ordinary criminality; yet civilised nations have added to it the utmost ingenuity of torture.

The illustration of the ludicrous is not complete without remarking that the collective pleasure is so great as far to outweigh the pains even of the passing sufferers. In order to provide ourselves with the enjoyment, we are willing to be victims in turn; a small amount of occasional suffering is rewarded by a large fruition of pleasure. Something of the same kind happens in the acuter forms of teasing; the schoolboy undergoes the torments of his initiation for the sake of becoming one day a tormentor himself. So that, with good management, even the malevolent pleasure has something of the diffusive tendency attributed to benevolent pleasure; it multiplies itself, and more than defrays the cost of the sacrifice. This of course is the last refinement of the passion. In the evolutionist millennium, when altruism will be developed to the point of destroying all the coarse and brutal forms of the pleasure of cruelty, the arts of comedy, as well as the play of humour in our social intercourse, will be saved.

At the risk of being tedious, I must dwell a little farther on an aspect of the ludicrous already implicated in our examples, namely, the efficacy of purely fictitious sufferings in awakening our interest. The children at the pantomime are aware that the clown's ingenious teasings are all unreal; yet the mere idea is delightful. So it is with the fictitious in comedy and romance. The charm in witnessed suffering (properly regulated) is so great as to dispense alike with our own self-assertion in causing it, and with the reality of the cases. Now, it must be a very powerful feeling that can be worked upon in this way. The love-passion, and the admiration of personal beauty, attest their strength by responding to the most far-fetched examples. Hamlet affects astonishment at the player's excitement over Hecuba; so he might ask, What is Helen of Troy to us in the present day? But if a picture of female beauty, immersed in stirring adventures, can be skilfully set forth, it will interest the human race to the end of time; the natural intensity of the sentiment of love being the sole explanation. And if we can take delight in the mere recital of gratuitous sufferings, with only an insignificant pretext, what inference can be drawn, but that suffering fascinates, that is, pleases us? All the other explanations—Power, Self-assertion, Love of Excitement—melt away in the presence of mere imaginary forms of infliction.

The love of Sport needs the delight in suffering to maintain it. In the sport of the gun we must have the pleasure of killing; otherwise, we might be equally amused by firing at bottles projected in the air at a proper distance. In hunting, we enjoy the torture of the fox, if only in the indirect form of sympathy with the hounds, whose blood-thirstiness is thoroughly unaffected and unconcealed.

I cannot enter into the farther question of the connexion of malevolence with our joy in the Sublime; that needs a discussion to itself. If the sentiment is once shown to exist as an independent fact of the mind, and not as a mere occasional incident of other feelings, it will crop out in many more ways than those we have now been considering.

Mr. Bradley ends with a sort of apology for our apparent malevolence, as he accounts it to be. He says—"We all cling to our wrongs, for they keep us in mind of our rights, and we hug our hatreds since without them how little would be left to some of us". But the most prosperous of human beings include, in the roll of their pleasures, a number of hatreds. For my own part, I would as soon be called malevolent after the purest type, as declared capable of hugging hatreds to make up for a joyless lot. The question ever recurs—Why is hatred such a source of consolatory feeling, if there be not a fountain of pleasure in connexion with the sufferings of others?

A. Bain.

SYMPATHY AND INTEREST.

Does our interest in others come solely from sympathy, and is sympathy a mere consequence of intellectual progress? In the following remarks I shall try to show that these questions must be answered in the negative. They suggest a simplification which the facts will not warrant, and they would press a truth till it becomes one-sided.

Taken broadly, it is true that the idea of others' pleasure or pain must itself be pleasant or painful to my mind. It is true that I am led to promote or to remove this source of my feelings, and it is true that, in the main, I do so by a benefit to the person concerned. It is true once more that mere want of perception is a sufficient cause of defective sympathy, and that a very large part of immorality can be fairly reduced to perceptive stupidity. But I think that these truths are not the whole truth. Instead of saying that interest comes from sympathy we might say that sympathy depends upon interest. And the second statement, I believe, would be as true as the first. In what follows I shall not aim at a complete view of the subject, but shall point out that to some extent we do first perceive because we happen to love, and do not love merely because we happen to perceive.

It cannot in the first place be said that sympathy by itself *is* interest. In rudimentary sympathy the expression of a feeling by another person produces in my mind the feeling which I have similarly expressed. But this feeling contains no reference to another person, nor in itself is it even an active desire. And when it leads to desire I need not aim at the benefit of the person who thus affects me (*cf.* Stephen, *Science of Ethics*, p. 243). Like some gregarious animals I may turn against the being the sight of whom gives me pain.

Thus sympathy is not interest; and on the other hand we can have interest without any sympathy. The condition of something other than ourselves may be pleasant or painful, although we do not sympathise. Let me endeavour to explain this.

We are sorry when we see the daisies mown or the trees cut down, and we take an interest in many inanimate objects. But do we sympathise? For trees or flowers we to some extent do feel, but can most of us feel for a book or a house? The illusion is possible, but does it always exist? When the bird cleaves to its eggs and the cat to its den, when the child bewails his broken toy, and the workman groans over the spoiling of his work, when the loss of common articles, if long-possessed, can vex us, and when the mere alteration of places that we love makes us wish for the old scene—is there everywhere here a latent sympathy? Such an explanation would surely in the end prove over-strained. But, if so, we may have interest when sympathy is absent.

Is this fact inexplicable? So far from being so, it is even a psychological necessity; and, if we could not love without sympathy, our whole nature would have been changed. We shall agree, I think, that to feel pleasure in one's own welfare and pain at one's own loss is possible without sympathy. Well what is this 'self' in which we take an interest? Is it confined to the sensitive parts of our body? May not rather our idea of that which is our 'self' include anything which is immediately connected with our well-being? We might say that the 'self,' in which we feel interested, is the world of our habitual sources of pleasure. And when anything we regard as such a source is damaged, we feel that our personal existence is lowered, and are at once concerned to protect or recover. I cannot indeed see how this fact should be otherwise.

Thus interest precedes sympathy, is possible without it, and does not always rest on it. But, when we pass to our interest in animate beings, then sympathy will come in. For we cannot have regard for the feelings of others unless we perceive those feelings, and we cannot perceive them unless in some measure we ourselves feel them. And here at least it may be contended that perception comes first, and that the process is primarily intellectual. Here at least, we may be told, it is defective understanding that is the cause of our deficient sympathy.

But even this contention I cannot admit. I do not doubt the validity of the process described. The mere intellectual apprehension of another's pleasure is assuredly an actual emotional fact, and that emotion must in the main cause an interest in the welfare of the other person. This account will cover a great part of the phenomena, but it will not cover them all. For the interest need not come from and depend upon the perception, while on the other hand the perception may depend upon the interest.

The first point I have explained. When our pleasure or pain is identified with an object, we desire the continuance or cessation of that object; and our desire is so far free from sympathy. The mother is an object of desire to the child before he can know that she feels pleasure or pain. And when this knowledge has come in, I see no reason to suppose that it makes such a simple affection impossible. But, if so, speaking broadly, our sympathy might more depend on our attachment than our attachment on our sympathy. And we may remember that selfishness and defective sympathy are not *always* concomitant, nor again do their opposites always go together.

But—to come to the second point—even where they coincide, and where our interest in others seems proportionate to our intellectual apprehension of their state, even here I must pause and must raise a doubt. You tell me that I sympathise because I perceive, but *why do I perceive?* When C is in pain why does A's

mind dwell on this, while B remains blind or inattentive? Can we say that it is simply because B is stupid? Is it true that the most clever persons are the most sympathetic, and the most sympathetic the most clever generally? Experience shows the opposite. Take, for example, our present interest in the lower animals as compared with that felt by our fathers and grandfathers. The change is striking, but I do not see how it can be simply set down to general growth of intellect. It would be as true to say we are now less obtuse because our sympathies are wider, as to assert that these are wider because we are more clever. And if in answer I am told 'not more clever *generally* but in this *one* respect,' that reply is an admission. Why in this one respect if there is no special reason, and what is this special reason?

Let us state the question thus. Granted that if my attention is fixed upon the misery of others, that will lead me (speaking generally) to regard them with an active interest in their welfare —granted this, why does A's attention keep fixed while B's fails and wanders? Is it not often because A takes an interest while B takes none? And what is this interest? Is it purely theoretical? We cannot say that. Apart from the doubt (which I do not entertain) as to the existence of *any* pure theoretical interest, it is certain that at first the direction of our mind is wholly practical. At an early stage there *is* no attention save practical interest. But if sympathy, to be active, involves attention, while attention itself comes from practical feeling, is it not clear that our regard for others' welfare does not *always* in the end depend upon intellect? If so, the doctrine we criticise has proved one-sided. It is a simplification which would shut out of view one great part of our nature.

We might learn something on this point by considering the development of the lower animals. Are sympathy and affection proportional to intelligence? Are 'clever' and 'affectionate' inseparable qualities? The example of ants and bees would not support an affirmative answer. Co-operative societies perhaps may exist before intelligent sympathy is even possible. But at any rate it is clear that in sympathy we have not got the sole root of morality. If it is right to affirm, Without sympathy no interest, it is as right to affirm, Without interest no sympathy. I believe *neither* would be accurate.

A further consideration of these points would, I venture to think, make the instructive discussion in Mr. Stephen's pages still more instructive.

F. H. Bradley.

KANT'S THEORY OF MATHEMATICS.

As Mr. Sidgwick thinks I am bound, as a defender of Kant (of whom, however, I am not by any means a thorough-going disciple), to show that $7 + 5 = 12$ is a synthetical judgment, I desire to state my reasons for arriving at that conclusion. The argument to the contrary is that stated by Mr. Sidgwick, *viz.*, that, starting with the definition of 12 as $11 + 1$, we can logically deduce the proposition $12 = 7 + 5$ without employing any principle except "the sums of equals are equal," which Kant himself describes as analytical. Mr. Adamson, like the late Dean Mansel (*Prolegomena Logica*, p. 116), seems to think that the definition of 12 as $11 + 1$ should not be conceded. Without dissenting from this, I propose to take a different ground. The argument proceeds $12 = 11 + 1$, but $11 = 10 + 1$, therefore (since the sums of equals are equal) $12 = 10 + 1 + 1$; but $10 = 9 + 1$, therefore $12 = 9 + 1 + 1 + 1$; and $9 = 8 + 1$, therefore $12 = 8 + 1 + 1 + 1 + 1$; and $8 = 7 + 1$, therefore $12 = 7 + 1 + 1 + 1 + 1 + 1$. So much of the argument is perhaps strictly logical, but now we come to the proposition $1 + 1 + 1 + 1 + 1 = 5$. How is this shown? Mr. Sidgwick would probably say that, starting from the definition of 5 as $4 + 1$, we could in the same manner logically arrive at the conclusion that $5 = 1 + 1 + 1 + 1 + 1$. But how do we know that the number of units in the latter equation is the same as in the former? Simply by counting. To this process, after all our logical reasoning, we must come in the end. And though the logical process is complete as soon as the number of units is set out, the task of counting them would, in the case of large numbers, be very difficult and perhaps entirely beyond the capacity of some persons who were able to follow the reasoning. Accordingly Kant says that the synthetical character of arithmetical judgment will appear more clearly if we try large numbers. But if counting is a synthetical process resting ultimately on an appeal to intuition, the Kantian doctrine seems sufficiently established. Indeed, I doubt the possibility of retaining the requisite number of units in the memory during the counting operation unless they are represented in intuition. But in any case they do not count themselves. That task must be performed by the thinker.

I wish to add in conclusion that I am not in the least surprised to find that Kant has somewhere spoken of Physical principles as Philosophical cognitions, for his language is very vacillating and inconstant. But in the well-known section of his 'Methodology,' in which he shows that the Mathematical Method is inapplicable to Philosophy, he seems to me to confine the latter term to Ontology, in which sense I therefore employed it in that connexion.

W. H. S. Monck.

Mr. Monck's argument is clear and to the point. But he will see, I think, on further consideration, that, if it is once granted to me that the equation between a number and the number next below it + 1 is the definition of the higher number and therefore an analytical proposition, I can deduce $12 = 7 + 5$, without any more "counting" than is involved in the substitution of the right-hand term of such an equation for its left-hand term. This deduction, as I conceive it, diverges from that which Mr. Monck has given when the step $12 = 10 + 1 + 1$ is reached: at this point I take the definition of $2 = 1 + 1$, and substituting 2 for $1 + 1$ in the equation first given, I get $12 = 10 + 2$: then substituting $9 + 1$ for 10 I get $12 = 9 + 1 + 2$, and using the definition of $3 = 1 + 2$ as I used the definition of 2, I get $12 = 9 + 3$: and so on till by precisely similar steps I arrive at $12 = 7 + 5$. Now I do not suppose that a Kantian will contend that the conversion of such a proposition as $12 = 11 + 1$ is a procedure which requires us to go beyond our concepts to intuitions: and Kant has expressly declared the analytical character of the principle that the "sums of equals are equal". Hence I do not see how my conclusion—that $12 = 7 + 5$ is deducible from propositions which Kant must admit to be analytical—can be disputed except by disputing the analytical character of such propositions as $12 = 11 + 1$. Mr. Monck, I gather, does dispute this; at least he refers without dissent to Mansel's argument (*Prolegomena Logica*, p. 116). Mansel there says that to "assume the definitions of the higher numbers (2 is 1 + 1, &c.) . . . is in fact begging the whole question. The real point at issue is . . . whether a man who has never learned to count beyond two, could obtain three, four, five, and all higher numbers, by mere dissection of the notions which he possesses already." But, as I have urged in answer to Mr. Adamson, the fact that a man who has only counted two, requires a fresh act of synthesis to form the notion three cannot, on Kantian principles, be adduced to show that $3 = 2 + 1$ is a synthetical—as contrasted with an analytical—proposition; because, according to Kant, *every* analytical proposition is only possible on the ground of a previous synthesis, as "the understanding cannot analyse except where it has previously combined". Mr. Adamson says that he does not see the bearing of this doctrine of Kant's on the question in dispute: but I am not without hope that Mr. Monck may see it, since it appears to me completely to destroy the force of Mansel's argument.

I now turn to the distinction drawn by Kant in the 'Methodology' between "philosophical" and "mathematical" cognition. Mr. Monck still thinks that "philosophical" is here to be understood as equivalent to "ontological". If, however, he will compare § 7 and § 15 of the *Prolegomena* with each other and with the passage in the 'Methodology,' I think he will see, first, that the distinction drawn between "Philosophie" and "Mathematik" in § 7 is identical with the distinction between the same two notions in the 'Methodology'; and, secondly, that the "Philosophie" which in § 7 is said to content itself with "discursiven Urtheilen aus blossen Begriffen" must include the "philosophischen Theil der reinen Naturwissenschaft" which in § 15 is similarly said to consist of "blos discursive Grundsätze aus Begriffen".

Mr. Adamson's remarks on this distinction in his rejoinder appended to my Note in Mind XXXI., 424—no less than his remarks on analytical and synthetical propositions—seem to me to indicate forgetfulness of the previous course of the controversy and of the points at issue. To make this clear, I will briefly retrace the steps of our argument. I criticised Kant's application to Algebra of the distinction between Philosophical and Mathematical cognition, as given in the 'Methodology'; the distinguishing characteristic being that Mathematical knowledge is obtained by "the construction of

concepts"—for which *a priori* intuition is required—and not, as philosophical knowledge, from concepts without such "construction". Mr. Adamson answered by suggesting that I (erroneously) "regarded the mathematical intuition as a single definite object and not as a schema". I replied that it is impossible that Kant should have made the difference between "Philosophie" and "Mathematik" to consist in the fact that the latter requires schemata; since "Philosophie"—at least "der philosophische Theil der Naturwissenschaft"—requires schemata no less, according to the fundamental doctrine of the 'Analytic'. This seems to me a conclusive proof of the inadmissibility of Mr. Adamson's suggestion; and I am surprised that he does not perceive its relevance. I further pointed out that the mathematical intuition of which Kant speaks in the 'Methodology' is expressly stated to be an "individual object," by means of which the "Begriff" is contemplated "*in concreto*," and an object which can be represented either in pure intuition or on paper; and that Kant certainly would not have applied any of these phrases to the schema. I thought that the briefest references to the section on Schematism in the 'Analytic' would have made this clear to Mr. Adamson: but as this is not the case, and as I can hardly ask for space to quote the relevant paragraphs at full length with a commentary, I must content myself with referring the reader to the whole passage "Das Schema ist an sich selbst . . . zusammenhangen sollten" (pp. 142, 3, Hart.).

H. Sidgwick.

HYPOTHETICAL SYLLOGISMS.

The question whether the so-called Hypothetical Syllogisms have, or have not, the character of Categorical Syllogisms, has been so much discussed that it may seem an impertinence to offer anything further on the subject. But, so far as I have observed, no one has brought into prominence a distinction which seems to me to be here of decisive importance, the distinction, namely, between what are called in Prof. Goodwin's *Greek Grammar* General and Particular Conditional Sentences. Examples of General Conditional Sentences are: 'If a man is dyspeptic, he is unhappy'; 'If salt is dissolved in water, the boiling point of the water is raised'; 'If an ancient Athenian was thought politically dangerous, he was liable to be ostracised'. Examples of Particular Conditional Sentences are: 'If A. is a victim of dyspepsia, he is to be pitied'; 'If this water is salt, it will not boil at 212°'; and so on. Now, whatever one may think of Mr. Venn's account of propositions of the former kind (*Symbolic Logic*, chap. xvi.), certain it is that these propositions are universally understood as stating general rules about matters of fact, and that they may be transformed, without appreciable difference of meaning, into Categorical Universals; *e.g.*, 'All dyspeptics are unhappy'; 'All salt water has its boiling point above 212°'; 'All ancient Athenians believed to be politically dangerous were liable to be ostracised'. When a Hypothetical Syllogism starts off with a General Condition, the second premiss does not, properly speaking, 'affirm the antecedent' or 'deny the consequent'; it

affirms that a particular example of the class referred to in the antecedent has the character there referred to, or denies that a particular example of the class referred to in the consequent has the character there referred to. In other words, the relation of the two premisses to one another, and of course also the relation of premisses to conclusion are precisely what they are in Categorical Syllogisms of the First Figure; the two classes are only verbally distinguished from one another. Not so with the arguments whose major premiss, so-called, is a Particular Condition. These cannot be exhibited as Categorical Syllogisms except by substituting for the special or concrete condition a general rule said to be implied. Thus Mr. Venn *(Symbolic Logic*, p. 333) treats the proposition 'If the glass falls [to-morrow], it will rain,' as implying 'All falling barometers are followed by rain'. But, in the first place, the difference between expressing and implying a general rule is surely important enough to create a difference in the treatment of Hypothetical Syllogisms by Formal Logic; and, in the second place, in some cases (*e.g.*, 'If you offered me a dollar, the book shall be yours') it seems impossible to discover any tacit reference to a general rule, while in other cases where there is undoubtedly some such assumption, it may be difficult or impossible to say precisely what it is. Thus when I say, 'If the glass falls to-morrow, it will rain,' I may not mean to imply that all falling barometers are followed by rain, but that all barometers which fall a certain number of hours after the occurrence of such meteorological conditions as now exist are followed by rain. But on this point I need only refer to the remarks on concrete propositions in the paper contributed by Mr. Alfred Sidgwick to MIND XXIX.; though I cannot follow him when he appears to assume a class of abstract-concrete propositions as tolerably well marked off from the concretes. The concretes seem to me to shade into the abstract-concretes by imperceptible gradations. Both constitute, formally, one class, which is broadly distinguished from the class of true abstract or general propositions.

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VII.—CRITICAL NOTICES.

Essays in Philosophical Criticism. Edited by Andrew Seth and R. B. Haldane, with a Preface by Edward Caird. London: Longmans, Green, 1883. Pp. 277.

The appearance of the nine Essays which form this volume is no unworthy witness to the presence of the 'Neo-Kantian' school as a party and a power. Their method is well indicated by their dedication to the memory of Prof. Green, and the venture of the writers in applying that method is vindicated in the preface by Prof. Caird, who refers also to Prof. Green's general character and the loss to philosophy by his death. The Essays, Prof. Caird tells us, were written independently, the bond of agreement between the writers being as to the lines along which philosophy must proceed. They are at one in the method of philosophical inquiry rather than "in any definite results that have as yet been attained by it". This method is that with which the names of Kant and Hegel have been specially associated. But the writers wish to show a development which shall be living, and not a reproduction which is dead. The evidence of the life of this development "must lie in its power to meet the questions of the day, and in the form in which they arise in that day," and the volume before us is an attempt by the writers to exemplify the bearing of their philosophical principles upon pressing problems. This being the chief purpose of the book, we seek earnestly for the new service to be given in the solution of such problems, and for the defects in other doctrines which are to be superseded. The consideration of these points will be more concerned with the heart of the book than would be any discussion as to the horror of Kant or the perplexity of Hegel at this recent outcome of Critiques and Categories. This needs to be said, the more perhaps as the writers may themselves be not unanimous in their views on this historical point (compare Mr. Seth's careful sketch in the first essay with Mr. Sorley's account of Kant's position, p. 116). Some of the essays exhibit a clearness in distinctions and a largeness of view especially attractive to the patient reader of a different school who may not have expected to find them, but I note here and there throughout the book great failures to appreciate the conceptions of others, and sometimes even an inadequate appreciation of the relations involved in their own principles. The first two essays, which are closely related in subject, deserve special attention, and should go some way towards a reconciliation of opposing theories. There is a much greater extent of territory common, for example, to those who accept Evolutionary Empiricism and

those who accept the new theory of knowledge, than the ordinary member of either party can see; and these Essays have their value as helping to clear this common territory, even though they should claim some of it exclusively for their own.

Mr. Seth, in "Philosophy as Criticism of Categories," begins by giving an account of Kant's system, especially with reference to the notions he destroyed. Kant's method—the criticism of conceptions rather than the criticism of faculties, a somewhat misleading title which Kant himself frequently uses—was the true one, but was not carried out by him thoroughly, as he still "dogmatically assumed the conception of the mind as acted upon by something external to it". Hence the *Critique* "sets out from a psychological standpoint and never fairly gets beyond it," although "this point of view *is* negated and surmounted in the *Critique*" (p. 11). In Kant's scheme there remains a reality behind phenomena, of which we have no knowledge, knowledge being confined to a "spatial world of interacting substances". This view is erroneous, and really results from Kant's psychological dualism, of which his "division of the mind into receptivity and spontaneity is the mere correlate". But the spatial world—the separation of space from the categories not being justifiable—is simply the world that appears under the construction of Kant's categories, which are "*inherently* inadequate" to express more. The opposition between the world of sense and the world of ethics is not an opposition of phenomenal and noumenal, but rather a distinction "between more abstract and more concrete points of view". Each world is as real as the other, though neither point of view may be complete.

> "It is the province of a theory of knowledge to point out the relation of the one point of view to the other, and, in general, while showing the partial and abstract nature of any particular point of view, to show at the same time how it is related to the ultimate or concrete conception of the universe which alone admits of being thought out without self-contradiction" (p. 21).

Kant himself admits that experience is not exhausted by his twelve categories, the idea of Freedom being necessary for the understanding of action determined by ends, as we find in the world of Ethics. In this *intelligible* ethical world, according to Kant, man has "the consciousness of himself as intelligence, *i.e.*, as rational and through reason active, which is to say, a free cause". "Self-consciousness is here put forward explicitly as the one noumenon to which all phenomena are referred, and by which they are, as it were, judged and declared to be phenomenal. This is the real Copernican change of standpoint which Kant effected, or at least which he puts us in the way of effecting" (p. 26). Mr. Seth then illustrates the distinction of categories by considering "how the ethical point of view stands related to the mechanical". Science rightly objects to any view of freedom

according to which the man is lifted above his surroundings, and can hurl a "solely self-originated fiat into the strife of motives beneath". No such irrational view is here urged. There is no breach in the series of physical events. But to consider them merely as "mechanical transformations" is not to exhaust their significance. What from one point of view is a physical event—a link in a mechanical series—is from another point of view a moral event, which implies "the self-determination of the rational being". "The world of ethics is superimposed therefore upon that of science, not as contradicting it, but as introducing a totally new order of conceptions, by which actions which are for science mere factual units in a series, become elements in a life guided by the notion of end or ought" (p. 29). Thus the category of the scientific observer is cause and effect; the category of ethics is "end, with its correlative obligation". There are, however, other points of view, which Kant recognises in the *Critique of Judgment*. "These are the æsthetic and the teleological judgment of things," or "the phenomena of beauty and of organisation"; and Mr. Seth proceeds to deal with the last of these, *viz.*, organisation, and to maintain against Kant that the "relation of organism to mechanism" is that of "a more adequate to a less adequate interpretation of the same facts," and not that of subjectivity to objectivity.

But there is a higher category still than that of organisation required when we deal with conscious individuals and the social organism. This supreme category is Self-consciousness. Now, that the different points of view from which the world is contemplated are confused in the mind of the ordinary scientific man cannot be doubted, and praise must be given to the endeavour of Mr. Seth and Messrs. Haldane to make clear that such confusion of categories does exist, and to illustrate how reconciliation between conflicting views may be produced by the disentanglement of the planes of outlook. Whether their method of disentanglement is the best remains to be seen. My own chief difficulty arises not so much from the Self-consciousness itself, but from the way in which they speak of it, and I shall consider this more fully, together with some of the previous points, in connexion with the next essay. We have seen that Mr. Seth, after urging that the distinction between the world of ethics and the world of sense is not that between noumenal and phenomenal, draws a conclusion from Kant (whether rightly or wrongly, I do not now inquire) that "the ultimate noumenon is to be found in self-consciousness, or in the notion of knowledge and its corollaries" (p. 27). The exact position adopted here is not made much clearer by the previous remark that "there is nothing transcendent, no unknowable, if we once see that a phenomenal world is a permissible phrase only when taken to mean something in which reason cannot rest". Again, self-consciousness is "the fundamental presupposition and the supreme category of thought" (p. 29). What is this Self?

"The self is individual only to the extent that it is at the same time universal. It knows itself, *i.e.*, it *is* itself, just because it includes within its knowledge not only one particular self, as an object in space and time, but also a whole intelligible world embracing many such selves" (p. 34). I cannot confess to being certain of the meaning of this passage. It appears to me to include a statement which is not expressive of what is found in my experience, but consists of a hypothesis offered as explanatory of my experience, and as such will be considered afterwards. Much more intelligible is the statement that "the self *is* the world and the world is the self," with the accompanying passages (p. 38). It is to this notion of self-consciousness, Mr. Seth urges, that "our whole criticism of categories leads." It is identified with knowledge and the unity of apperception (p. 35). When it is said that the categories are "simply stages or phases of explanation (of greater or less abstractness) which necessarily supersede one another in the development of knowledge" (p. 35), can we substitute self-consciousness for knowledge? Knowledge is described as being related to a "universally synthetic principle," the transcendental Ego (p. 36). On p. 38 I find the "transcendental self" referred to as "the implicate of all experience,"—"the necessary point of view from which the universe can be unified,"—and "the ultimate synthesis of thought". Are Knowledge, Self-consciousness, and the Transcendental Self identical? What then further is the Transcendental Self? "The theory of knowledge makes no assertion" of its existence otherwise than as the form of the Empirical Ego. Is the supreme category, then, merely the form of the Empirical Ego? Let us hope for light in the next essay. Mr. Seth's examination reaches the conclusion that "the Kantian criticism with its claim to map out knowledge and ignorance" must assume "the less pretentious form of a criticism of categories". "On the largest scale the advance of knowledge is neither more nor less than a progressive criticism of its own conceptions." The mutual criticism of their categories should not be left to the sciences themselves. Philosophy as theory of knowledge is to act as critic and arbiter, and show how the different points of view are related.

Some of the ground in Mr. Seth's essay is covered also in Essay II., "The Relation of Philosophy to Science," by Messrs. R. B. Haldane and J. S. Haldane. The point of the new criticism, say the writers, "may be defined, in its own somewhat uncouth language, as a claim to have exhibited even the simplest phases of sensation as possible only through the operation of an intelligible synthesis which cannot itself be made an object of experience, because only through it is experience possible" (p. 41). This seems to be a hypothesis to explain how experience is possible, as is apparently conceded by the writers (pp. 46, 63). We devise a conception, and accept or reject it "according as it does or does not upon application explain the facts" (p. 63). Whether this

new conception does explain the facts we shall see later. I wish to point out at this stage that the "uncouth language" used above refers to something which cannot become an object of experience, but which is nevertheless described in terms drawn from experience, such as *synthesis* and *operation*. Hence to use these terms of that through which experience is possible is to fall into that confusion of categories against which the writers warn us. Nor do I find this confusion avoided when the writers come to speak in their own language. After a concise account of Kant's real treatment, as they conceive it, of the problem of knowledge, illustrating his meaning and inconsistency by reference to the categories and his views on teleology, they proceed to briefly characterise the fully-developed theory resulting from the principle laid down by Kant.

"The fundamental fact beyond which we cannot get is the fact of self-consciousness. This fact contains within itself elements which, while inseparable in existence, are yet distinguishable in thought. We find a self limited by an objective universe. But the one cannot be separated from the other, and we come to find that, although it is only as apparently external to and independent of one another that these two elements can be made objects of knowledge, they must yet be assigned to a common position as moments in a higher synthesis of thought. But this synthesis can never become an object, *i.e.*, conscious of itself, save under this form of limitation" (p. 44).

The elements somewhat hidden in the statement that "we find a self limited by an objective universe," I take to be—the consciousness of self, inseparable from the consciousness of a not-self. If the theory is merely "an analysis of the fundamental unity of knowledge," what is meant seems to be that the consciousness of self and the consciousness of not-self are both *mine*, are both the consciousness of my (transcendental) Ego. In this case the Ego is the "synthesis" and becomes conscious of itself (empirical) as limited by an objective universe. So far as this statement is merely "an analysis of the fundamental unity of knowledge" it may be accepted. But much more seems to be attempted, in the essay at least, if not in the above particular passage concerning the "fully-developed theory". If such a theory is "not a theory of creation," why is the synthesis called in various places throughout the essay *creative?* However, an explanation of the fact of experience *is* offered, and asserted to be the "only possible" one. It is that mind, as the creative synthesis of thought, is the ultimate reality and constitutes experience (p. 46). The higher synthesis, then, of which the self and the objective universe are moments, is Mind. I am at this stage not sure of the interpretation. I admit for the present the term Mind as applicable to something which underlies, or overlies, the whole of my experience, and which as such can never be made an object of my experience. In the above offered explanation I do not know whether it is *my* mind or some *universal* mind which is meant. If my mind be meant, I

see no reason for assuming that it is *creative*, or that it *constitutes* experience, if *constitutes* means any more than I have admitted above. On the contrary, the *creation* involved in such an assumption is inconceivable. If some universal mind is meant, the hypothesis, besides being open to the objection that *creation* here also is inconceivable, is open to the further objection that the so-called explanation is no explanation at all. Nevertheless it is this latter position which appears to be intended. Experience is explained when we see that there is a universal self-consciousness in which the knowable world and the individual consciousness are constituted in an organic relationship. This explains nothing and assumes everything. The individual does in truth clearly know that the world manifested to him is not of his own making. How is it possible, then, for him to know it? Could he consciously spin out from himself every fact before him, the wandering problem would vanish for ever. As he cannot do so, let him shove the problem before the Unknowable, and there solve it for the same. But the problem so solved is solved only for the Unknowable, not for us. We have relieved It from the concern of pondering the cosmos, have shown It what It is, and how the thing is done. But until It changes places with the individual, the individual is as wise, or as foolish, as ever. But does not the Universal Self-consciousness constitute an organic relationship between the individual and the world? I thought we knew the chief part of this before. That there is a relationship between the individual consciousness and the world beyond it is only another way of stating the fact that the individual does in some way get to know that world,

> "And when, or how, or where we met
> I own to me's a secret yet."

But I suppose the answer that will be given to this is that the individual consciousness is identical with the universal consciousness. "Even finite self-conscious knowledge is potentially infinite, *i.e.*, is, in ultimate analysis, thought, not as presented to itself in self-consciousness, but as identical with the creative synthesis" (p. 45). Where, then, is it presented to itself if not in self-consciousness? A criticism of categories is here desirable.

Again, this creative synthesis "manifests itself in fundamental modes, which definitely differ from one another, but which mutually imply each other and are related in a dialectical development" (p. 46). This development is said to be "no affair of space and time," which are nevertheless "two of its stages". Does the word "dialectical" affect the word "development" so as to give it any significance when bereft of the notion of time? Are these "fundamental modes" objects of experience? If yes, how can there be a development of them which is no affair of time? If no, how can we predicate anything at all of them? Is it the development of the synthesis that is spoken of, and not the development of its modes? But the synthesis has been explicitly

distinguished by the impossibility of its becoming an object of experience; how then can we speak of its development? In short, the proposed explanation of experience needs more explaining than experience itself. The manifestations in the individual consciousness are reflected upon, and the antithesis between the self and the world accepted as in some sense necessary. Escape from it seems vain. That the individual should be conscious of what is not his consciousness must be unmeaning—and the other individuals of which he is conscious are not his consciousness. There can be nothing else but his consciousness,—which proposition even he regards as absurd. *Eurekâ!* there is a universal consciousness breaking up into subject and object, into self and world, and with this universal consciousness the individual consciousness is identical; and so the awkward limit is supposed to disappear. Such perhaps is the sort of process, where it is seen that the explanation, so far as it is thinkable, is simply an idealisation of the problem with which we started. I have admitted above that the underlying or overlying something of my experience may be called Mind. Otherwise it is the (transcendental) Ego, and, as Messrs. Haldane clearly state on p. 46, it is not to be confounded with what they call "the subject-matter of empirical psychology". No more, then, is it to be confounded with what I call Thought, of which the only notion I can form is drawn from this same "subject-matter of empirical psychology".

The truth or untruth of the doctrine we have been considering does not affect the validity of the writers' illustrations of confusion between categories, though such confusion can be much more clearly shown, as it seems to me, from other standpoints. It does not follow, they say, that an object which from one point of view must be regarded as existing in a certain way, "exists in the world of fact only in that way". We are not entitled to regard the object as constituted by one category alone. With Kant there is a distinction in kind between the sorts of knowledge, but with the later theory the distinction is one of degree merely, and "from the relations of pure mathematics up to those of self-consciousness we have a chain of aspects of nature not one of which is reducible to another, but which are yet inseparably united together in thought" (p. 52). The writers illustrate the misapplication of categories by considering the phenomena of consciousness and of teleology, and also the scientific conceptions of organisation and development. The controversy about free will and necessity is also said to be due to a misapplication of categories. In dealing with the question concerning the relation between the physical phenomena of human organisms and the psychical phenomena we "naturally *attribute*," the writers appear to use phenomena of consciousness, phenomena of self-consciousness, and psychical phenomena as equivalent terms; and while apparently preferring the term psychological to psychical (p. 61,

note) they refrain from using it. No doubt the true distinction between physical and psychical phenomena is not clearly seen by the ordinary man of science. But why is Kant's view expounded, on p. 49, very much as though it were correct (with the *creative synthesis* introduced), while the fact that it is wrong is left to be pointed out in a note? The addition here of Kant's view in this way may prove misleading, especially as it is in the exact meaning of the supposed parallelism *in time* between the two series of events that the problem centres. The writers do not sufficiently show the importance of their special theory of knowledge in explaining the common error. We are told about different ways of regarding the phenomena, and the presence of higher categories, but nothing definite is given us, certainly nothing definite that is new and characteristic. And here I think we see not only the desirability of knowing when to apply such categories, but the need of having the categories systematically arranged, such an arrangement not being by any means "for the purposes of practical criticism of categories irrelevant" (p. 52). From the different standpoint of Barratt and Clifford the question gets a much clearer treatment, as in the distinction between objects and ejects to which the writers refer. No objection is made to Clifford's view beyond what may be implied in the remark that he had no acquaintance with "Kant's *real* teaching about the nature of knowledge" (p. 51, note). The other illustrations offered by the writers are also capable, I think, of a much clearer treatment from some standpoint *analogous* to that of the Mind-Stuff theory.

The scientific conceptions of Organisation and Development are dealt with at considerable length. The general view may be accepted, though not as peculiar to the essayists' theory of knowledge. The mechanical problem in connexion with changes in the organism is well put on p. 53, in fact so well put that the view propounded shortly afterwards concerning the growth of a newt's new hand in place of one amputated appears by comparison erroneous. If the links in the physiological series sequent upon the application of an electrical stimulus to the tongue can be regarded as due to the actions of forces mechanically considered, so also must be regarded the phenomena of reproduction. I do not mean in any way to challenge the position of the writers that "the categories of mechanism do not exhaust reality in its aspect of life" (p. 45), but I do mean to say that we must not entangle the plane of mechanism with the plane of teleology. The physical changes must be regarded as due to preceding physical changes, and as such perfectly explicable, or they are without interpretation at all, and the writers themselves appear to me in the instance before us to confuse the categories. They ask: "Is it conceivable that each of the thousands of separately existing cells concerned in the process should have a mechanism within it, which would cause it in spite of all obstacles to take up the

position, and undergo the modification requisite for the proper performance of its work in the newly developed hand?" (p. 55). The very form of this question shows a misappreciation of the scientific problem. Further, they ask: "Or is it conceivable that mechanical pressure of any kind should cause the bud to grow into a perfect hand?" Certainly it is conceivable, though the question, if not put incorrectly, is put crudely. Whether conceivable or not in the particular process, the hand as a physical arrangement is interpretable in no other way than by physical changes. This of course is not to deny that there are other aspects of the reality which are inexplicable by the category of mechanism. It follows then that the hypothesis stated by the writers and characterised as "alternative," is not "alternative". To call it so is to propound a dilemma analogous to that propounded by the dogmatist on p. 51, and to avoid such a reconciliation as the writers are seeking (p. 60). The limits of this notice forbid further detailed criticism of Messrs. Haldane's illustrations, and forbid also the substantiation of a more general criticism which may be made with reference to the method they adopt.

The method as put before us lacks psychological foundations. There can be no criticism of categories without psychological analysis of the conceptions involved and their relations to one another. Before we can speak of applying this or that category there should be some agreement reached as to the significance of the terms we use as categories. As an instance of what I mean, I may refer to the conception of Cause. The writers urge (p. 60), that "so soon as it is recognised that volition is really not to be looked upon as a process taking place in space, the dilemma that it must either be caused or uncaused disappears". But from my point of view, the central element of Cause is Will, and therefore the statement quoted seems to me to have no relevance to the controversy of free-will and necessity.

The writers' view of their method is that it "is not distinguishable in principle from the method of science". The object of the theory of knowledge, the fact of self-consciousness, must be assumed "as something ultimate given to it, just as all sciences assume their own objects". The peculiarity of the object here is that it falls only partially within "the field of the object," being "at once knowledge as presented to itself and the act of presentation". The method must therefore "not presuppose a distinction between knowledge and its object," and this condition is satisfied in seeking from the nature of experience "to determine a conception of the nature of knowledge that would explain it" (p. 63). How far experience has been explained by the writers we have already seen. They conclude that the theory of knowledge must have a place in relation to the whole body of scientific inquiry, dealing critically with the abstractions of the inquirer, assigning to them their true position, and making clear the real nature of scientific method.

Mr. Sorley's essay on "The Historical Method" has its importance as indicating the position of the essayists on psychological questions. The writer points out the value in certain ways of the historical method as he interprets it, considers its use in Jurisprudence, Psychology, and Ethics, urges that its worth in the philosophical inquiry as to the nature of knowledge is his fundamental question, and regards his examination as leading to the conclusion that the applicability of the historical method, "however wide, is necessarily limited. It implies categories of which it can only trace the historical manifestation, leaving the investigation of their logical position and nature to the theory of knowledge or to the theory of action; and it leads up to problems which pass out of the range of the chronological sequence to which it is restricted" (p. 125). But surely no adherent to the so-called historical method would admit that it is to be adopted *in place of* "that of direct observation and reasoning," as the writer implies (p. 106), even if he admitted it was "but a branch of the realistic or experiential method" (p. 104)? At the outset, it is not made clear whether the social sciences are to be placed on "a different level from the natural" because of the "self-consciousness" in the former, or because of their greater complexity of factors (pp. 103, 104), and this last is certainly not a sufficient reason. A similar confusion occurs on pp. 110, 111 as regards the difference between the legal conceptions of the vulgar and those of the expert. There is an obscurity, too, in the statement of "the fundamental question of ethics," which is said to be "the differentiation of moral or consciously determined action from that which is merely natural or determined by conditions independent of consciousness" (p. 120). This rather suggests that Mr. Sorley would do what Messrs. Haldane urge we cannot do, *viz.*, "construct the moral consciousness upon physical principles" (p. 57). By "conditions independent of consciousness" the writer, no doubt, means conditions independent of the individual consciousness. The "final question of ethics" is to decide "between various ethical ends, and to determine that which 'ought' to be followed". The writer very easily denies the competence of the historical method, as he conceives it, to deal with either of these questions. In the body of the essay, passing from the dependence of the explanation of "ideals" upon the philosophic method adopted, Mr. Sorley contends that the central point of Kant's *Critique* is "the necessity of a reference to self-consciousness for all knowledge," and proceeds then to deal specially with Mr. Spencer's analysis of Space as a typical case of the failure of the "historical treatment" applied to a question "connected both with the theory of knowledge and with the analysis of mental states". He apparently supposes that the passage from the non-spatial to the spatial must be shown at some particular stage (p. 117). This shows his misappreciation of Evolution, and his deficiency in

psychological analysis. At no special moment of time can it be said—here the non-spatial is converted into the spatial, any more than we can point to a moment of differentiation of moral from natural action. There is, moreover, in the writer's view, a "germinal perception" (p. 119) which is not analysable, from which it appears that he has courageously hopped or skipped over divers critical and crucial parts of Mr. Spencer's argument. Hence such a misapprehension as that Mr. Spencer's analysis of space "presupposes that the distinction between various parts of our organism is already a distinction for the percipient subject before there is any spatial perception, and then evolves the perception of space from the consciousness of this distinction". Mr. Sorley confuses an inquiry concerning our "perception of space in its totality," where certain elements are given, with an account of the "primitive element out of which the consciousness of Space is built," *viz.*, the consciousness of co-existence. He should refer to § 334 of *Principles of Psychology* and the chapter on "The Relations of Coexistence and Non-coexistence," which seem to have entirely escaped his notice. Mr. Spencer is represented on p. 117 as identifying the "perception of motion" with "muscular sensations"! The word perception indeed does not occur on the page given in reference by the writer, Mr. Spencer's real description of "The Perception of Motion" being given at the conclusion of the chapter so entitled (ii., p. 231). Similar misconceptions vitiate the whole of Mr. Sorley's argument on the evolution of our notion of space. The application of the new method is here at least not successful. Contrariwise, there is exhibited an utter failure in comprehending the plainly-marked stages of a psychological analysis.

For the remaining Essays little more than a brief statement of their purport must suffice.

Mr. Bosanquet, the writer of "Logic as the Science of Knowledge," holds that the nature of knowledge can be exhibited in a system of stages or types. His object is to "indicate the combined unity and comprehensiveness which such a point of view may confer on the treatment of logic" (p. 68), and he attempts, first, to determine the nature and conditions of a science of knowledge; secondly, to explain the relation of logic as such a science to metaphysic and the real world; and, thirdly, to explain its relation to the traditional types of formal logic with their modern offshoots (p. 68). The province of logic is the science of such thought as claims to be knowledge. Thought that corresponds to fact is knowledge,—fact comes by experience—so that experience is the criterion of knowledge. The judgment is the rudimentary form of "that systematic unity the more and less of which constitutes the more and less of knowledge". "To understand this unity in its different but kindred manifestations, to appreciate the demands which in its various phases it makes upon its material, and to formulate these demands as the logical ideal

of knowledge, is what we understand by the function of logic as a science" (p. 72). The consideration of the contrast between logic, the science of thought as knowledge, and metaphysic, the science of reality as such, leads the writer to the conclusion that the general science of reality cannot be distinguished from the science of knowledge, and ontological speculations are to disappear. The writer compares his "proposed treatment" at great length with the formal logic of tradition,—and adopts Jevons's view of Induction that it is deduction regarded inversely. The writer's view of reason may be noted: "That the action of reason is varied and limited in individual men by dependence upon an animal mechanism is a belief now almost inevitable, whether true or not" (p. 74).

In "The Rationality of History," Mr. Ritchie considers the possibility and the character of a philosophy of history. The philosophy of history, we are told, "seeks to discover the 'ideas' of different periods in their relation to one another," and it "implies a teleological view of phenomena". The question how far such "an attempt to read the plan of Providence" (p. 132) is possible, is discussed. History is a "struggle towards rational freedom," and in this struggle the unity of humanity is presupposed. There are six main ways of regarding history, six categories by which to explain its phenomena, *viz.*, Chance, Providence, Decadence, Progress, Cycles, and Progress by Antithesis. I might ask whether the writer would assign another way to Evolution, or whether he would identify this with Progress. But he says that, in the attempt to make the conception of Progress real, it has been "narrowed down to intellectual advance," and this statement would not be applicable to Evolution. The formula adopted by Mr. Ritchie, though he admits it "can only be applied with great limitations in history" (p. 153), is that of Progress by Antithesis. The positive meaning of progress is "the struggle for freedom . . . the liberation of man from the domination of nature and fate". The "Antithesis" is not so clear.

> "Some elements of the spiritual life of man are realised by one period or nation; but just because they are *some* elements only, they are realised in a one-sided and exaggerated, and therefore self-destructive way. The next step is, therefore, in a contrary direction. Then comes an attempt to bring the two sides together. But because spirit is infinite and its temporal manifestation finite, this must always prove incomplete; and thus the world must proceed again through a new antithesis to a new reconciliation" (p. 152).

Now I do not deny that progress or evolution or the development of the idea may proceed by what might be called Rhythms, but that "the attempt to bring the two sides together" must always prove incomplete—I cannot get as a conclusion from the statement that "spirit is infinite and its temporal manifestation finite". The writer illustrates his view, chiefly by reference to Greece and Rome, and points out the difficulty of interpreting our own time, a difficulty which, as the writer is careful to note, Hegel did not

escape. The essay as to results is rather negative, saving the formula, but of this the writer himself seems somewhat doubtful.

In the essay "On the Philosophy of Art," Mr. Ker first describes Plato's theory of art, and shows the imperfection of it, art being represented in that theory as "valueless in comparison with philosophy". This separation of the two is the necessary beginning of a philosophy of art. The "theory of art as an education" is considered, and so also are the relations between art, science, and morality. The main point about works of art is stated to be that "they are phenomena that explain themselves" (p. 170). A moral act is said to be "a phenomenon whose true nature is not wholly apparent" (p. 173). I should class Mr. Ker's essay as a moral act rather than as a work of art. But perhaps the reader may find such passages as the following more intelligible than I do myself:—

> "The self-consciousness would believe itself to be absolute in itself, but it finds that it is absolute only so long as it does nothing. Its freedom is not freedom to do anything, it is mere negation. Then begins the endless progress of morality; it is forced outward into the objective world to make that freedom *apparent* which to the self-conscious subject is the reality of realities" (p. 175).

Much is said about the freedom shown in art. "Art is the vindication of present freedom." The problem of the philosophy of art is "to make the history of art intelligible—not simply a series of biographies or catalogues, of artists or their works, but a history showing the place of art in the development of the human reason" (p. 179).

As might be expected from the title of Mr. Jones's essay, "The Social Organism," he offers various objections to Mr. Spencer's view expressed in its later form in *Principles of Sociology*, vol. i. These parts of the essay are rendered worthless by the writer's peculiar misapprehensions of Mr. Spencer's view. One instance will suffice. On p. 190 Mr. Spencer is said to silently admit the supposition that "society is inorganic because discrete". A reference to §§ 220, 221 will show that the reverse of this is the case. In the very sections from which Mr. Jones quotes, Mr. Spencer shows how "the mutual dependence of parts which constitutes organisation is thus effectually established. Though discrete instead of concrete, the social aggregate is rendered a living whole" (*Prin. of Soc.*, i., 478). That Mr. Spencer's establishment has not escaped the notice of Mr. Jones is manifest from the fact that on p. 211 Mr. Jones curiously singles out the argument for that establishment, but applies it to a passage in the following section, which deals with the social sensorium! "We think Mr. Spencer's attempt to re-create the social unity by means of 'emotional language, and by the language, oral and written, of the intellect,' inadequate and superficial, though we cannot here fully discuss it" (p. 211). Other parts of the paper are more directly ethical, and these are marked by the writer's

emphatic assertions of the individual's freedom. Freedom is also the bond of the social organism, "its self-differentiating, self-integrating life" (p. 200). Hedonism, interpreted in the narrow sense of pursuit of pleasant sensations, is briefly criticised in order "to show that because its ideal is particular it has no ethical character". The writer's ethical ideal is the social organism, or rather "the moral organism which is embodied in the various forms of society" (p. 206). The synthesis here would appear exceeding small in the eyes of the writer of the last essay. Society is an organism "because the individual realises himself as an ethical being in society, and society realises itself in the individual" (p. 208). Mr. Jones seems to me to evade the difficulty as to the self-consciousness of the social organism. If the individual becomes conscious of himself by distinguishing himself from the environment (p. 211), why may not the social organism act likewise? But self-consciousness must be placed on the social organism somehow, which is said to be self-conscious because "it is conscious of itself in every self-conscious being" (p. 212). There is a noteworthy admission by the writer that a line can be drawn, if not very definitely, between consciousness and self-consciousness, though where it is drawn is "perfectly indifferent, at least to idealism;" and he insists that "the animal which is incapable of grasping its own end is an instrument, and not an organism in the true sense of the word" (p. 196).

The next essay "The Struggle for Existence—Hints for a Philosophy of Economics"—by Mr. Bonar, is clothed in somewhat different garb from the other essays in the book. The essay might be supposed to have mistaken its place but for a few "categories" it scatters towards the close. The writer of the previous essay would find it hard to reconcile his statements with some of those—much healthier—made by Mr. Bonar, *e.g.*: "To modern notions, then, society is made for man, not man for society" (p. 225). Mr. Bonar points out certain "social prolegomena, without which economical science is abstract and unreal". "They point to the entire impossibility of the Ricardian *régime* of rigorous competition; and, granting the possibility, they would qualify the conclusions of orthodox economics." He urges that the 'struggle for existence,' literally taken, is an evil; that progress depends upon ideas. The 'struggle for existence' means, in all but the lowest strata, ambition. Hence desire for material wealth as a means, modified in various ways by social and moral influences connected with the real end whatever that may be. Further, the competition of business-men is in many ways less rigorous than is commonly supposed. But surely these points are distinctly recognised by the economics of the present day. The writer's view of the function of the State I do not find definitely expressed. He would at least have all its members "placed in possession of their powers and made equal in oppor-

tunity". He is of course right in objecting to *laissez faire* doctrine, but just as much of course wrong in identifying Mr. Spencer's view with this, as he does on p. 231. Nor, as Mr. Spencer long ago pointed out, is the title "Administrative Nihilism" rightly applicable to his doctrine of Specialised Administration.

Repetition of an obscure principle does not always produce clearness, any more than it evolves truth out of error. In Mr. Kilpatrick's "Pessimism and the Religious Consciousness," the repetition is excessive. That the individual must be grounded in the universal consciousness, and that no criticism of the world is sound except from the point of view of the constitutive principle—these enunciations form no small ingredient in his exposition. From the point of view of this universal consciousness the truth of pessimism ceases, for the world no longer answers to its description. The synthesis of humanity as in Comte's Positivism is deemed insufficient, but the writer does not consider the wider view manifest in the doctrine of Evolution, which can hardly be called pessimistic. One of the main points of the essay seems to involve a contradiction. On p. 269 we find that all the evil of which an individual is conscious is due to his own act, and it is so due because the individual "is lifted out of his individuality, and is united to the principle through which the world is for him". But on p. 272 evil is asserted to be "the assertion of the self in its individuality" against this principle, and on p. 275 it appears that his deliverance from evil is his union with that principle. To him for whom the cosmos creaks along on a pivot of pain, I cannot see that any help is given by these vaguenesses about a universal consciousness. The comparative solidity manifest in the opening essays of the book is here frittered away into a febrile and futile phraseology, and the essay serves as a final indication of how words may be taken for thoughts, and of the critical state of a theory exhibiting the attempt at philosophy without a mastery of the meaning of psychology.

RICHARD HODGSON.

Studies in Logic. By MEMBERS OF THE JOHNS HOPKINS UNIVERSITY. Boston: Little & Brown, 1883. Pp. 203.

Mr. C. S. Peirce's name is so well known to those who take an interest in the development of the Boolian or symbolic treatment of Logic that the knowledge that he was engaged in lecturing upon the subject to advanced classes at the Johns Hopkins University will have been an assurance that some interesting contributions to the subject might soon be looked for. And such assurance is justified in the volume under notice, which seems to me to contain a greater quantity of novel and suggestive matter than any other recent work on the same or allied subjects which has happened to come under my notice.

It is a collection of papers or essays by several different authors —pupils, it may be inferred, of Mr. Peirce—concluding with an essay on the nature and foundations of Inductive Logic contributed by Mr. Peirce himself.

The two contributions which deal specially with symbolic non-quantitative Logic are furnished respectively by Miss Ladd and Mr. O. H. Mitchell. The former of these adopts substantially the Boolian calculus as modified by Herr Schröder, but with considerable additions. The main departures from the original calculus are to be found in the adoption of the now familiar mode of expressing alternatives in an inexclusive notation, and in the introduction of a symbolic procedure for expressing the true particular proposition. Of the former of these two points little need be said here, as the procedure in question is distinctly the popular one at present, and indeed ever since it was first familiarised to us by Jevons. That it produces a great simplification in procedure is undeniable, but it has what seems to me the serious defect, from a speculative point of view, that it does not lend itself to the use of inverse formulæ, such for example as those analogous to the operation of division. Against the use of such formulæ, however, the writers before us show a rather unreasonable antipathy, and Miss Ladd is certainly wrong in declaring that the only justification for them is based on the analogy of mathematics.[1] That the use of the division-sign was first suggested by virtue of such analogy is doubtless true; but each can now stand equally on its own ground of justification, for not a shadow of reason can be alleged why the notion of an inverse operation should not exist in purely qualitative inference. I can hardly conceive any more valuable speculative exercise than that of clearly realising and determining the conditions of an inverse process in Logic—say that of ascertaining, after we have defined and symbolised the process of determination or restriction, what must be the starting point, and what the limits of indefiniteness in the step of such restriction in order to arrive at a given result: in other words, having defined xy, of putting our interpretation upon $x \div y$. I am confirmed in this opinion by the fact that a writer such as Jevons, in his last logical work, should have still regarded such expressions as "impossible" ones. To my thinking, the value of the mental exercise in question outweighs the merits of the very elegant devices (of which a good account is given by Miss Ladd) for denoting the contradictory of any complicated expression, which are available on the non-exclusive method.

[1] "It is only on account of a supposed resemblance between the logical and the mathematical processes that an attempt to introduce them has been made" (p. 19). Considering the extent to which they *are* introduced by Boole, and with what no one denies to be consistent usage and correct results, something more than an "attempt" might be admitted.

The most important and characteristic point insisted on in this volume is the necessity of introducing an additional form of copula (or predicate) for the due expression of particular propositions. As the reader probably knows, it is a characteristic of one main form of the Symbolic Logic that it aims at throwing propositions into the form of denying that a certain class-combination exists: thus 'All x is y' is regarded as denying that there is any x not-y. This plan does well enough so long as we deal with universals, but when we come to particulars we find that if we are to retain the full signification, in respect of indefiniteness, of the word 'some,' such propositions cannot be expressed without recourse to some new device. Both Boole and Jevons indeed claim to introduce particulars, but scarcely any one who will carefully analyse the full import of the expressions they employ can allow them to be successful. In Boole's $vx = vy$, it is distinctly admitted that v is not to be treated as an ordinary class-symbol that may be equated to zero, and this restriction invalidates the introduction of such an expression into his most important generalisations. Jevons's CA = CB escapes this difficulty by the denial that *any* of his single letter-symbols can be equated to zero. In this respect he stands alone amongst modern symbolists, and the consequences are fatal to the true generality of his expression of universal propositions. An indefinite number of perfectly consistent groups of propositions would have to be refused admittance by him on the ground of mutual inconsistency, because they would lead to the obliteration of some single letter or class-symbol.

It is one great merit of the writers under review to have fully recognised this fact and to have grappled with the attempt at the general introduction of such propositions in their true indefinite form. With consistency, therefore, the fundamental distinction is found to lie, not between affirmative and negative, but between universal and particular propositions. It is the function of the former to *deny*, whatever may be their character in their common signification—to deny, that is, not a predicate of a subject, but the existence of a certain combination made out of the subject and predicate taken together. It is the function of the latter to *affirm*, *viz.*, to save the existence of a similar compound. 'All x is y' and 'No x is y' respectively deny the existence of the compounds $x\bar{y}$ and xy; whilst 'Some x is not y' and 'Some x is y' respectively save these compounds. Accordingly whilst mere class-reference leads to a dichotomy only, in that a thing must belong to the class or not, the act of judgment or assertion leads to a trichotomy, for we may affirm or deny or be in doubt about the matter. I do not mean that this distinction is in any way peculiar to the conception of logic in question, but it seems to be much more strongly emphasised here; for when we break up the universe into all the possible sub-classes yielded by the class-terms, it would seem that to save or destroy any one

of these classes makes as complete a pair of alternatives as to include or exclude an object in reference to them. Why this difference, then, it may be asked, between class-reference and predication; and is the three-fold character of the latter a necessary and permanent one? To enter fully into this inquiry would be a digression in a brief review of this kind, but a few hints may be permitted. In respect of the distinction between class-reference and predication, the answer would seem to be that subjectively regarded we should equally have to admit a three-fold division in the case of the former; for we must either know that an object does belong to a given class, or that it does not, or we must be in doubt about it. But we find it simpler to take a completely objective standing-point here, by admitting only the two alternatives, one or other of which must exist physically, and by referring the element of doubt to the region of judgment, *viz.*, of predication. As regards the finality of any such logical convention, it must be frankly admitted that it is not final, but then the science of logic itself belongs to a progressive or imperfect state of knowledge. Were our knowledge absolutely complete we should know for certain of any object whether it did or did not belong to any assigned class; its x and *not-x* status would not only exist but be known. And in the same way we should know of every assignable sub-class whether it existed or not. Accordingly, not to affirm would be to deny and not to deny would be to affirm: that is, on the Boolian conception of the logical universe, the class-elements which were not destroyed would be known to be saved. But this is of course a merely ideal state of knowledge, and its realisation would do away with all the utility and significance of Logic.

The copula-symbols employed by Miss Ladd are $\vee$ and $\overline{\vee}$. $A \vee B$ is to be read 'A is in part B,' or 'A is not-wholly excluded from B,' always with the special signification above assigned to the particular proposition. On the other hand, $A \overline{\vee} B$ is to be read 'A is-not B,' or 'A is wholly excluded from B,' and gives no implication that either A or B exists. That is, these are the expressions for the particular affirmative and universal negative, whilst the universal affirmative 'All A is B,' is written $A \overline{\vee} \overline{B}$, *viz.*, A excludes not-B. This mode of writing propositions is, I think, more consistent and intelligible when the constituent class-symbols are all gathered to the left side of the expression, and the whole is read as a declaration of existence or non-existence of the compound class-term thus produced. For instance, we may substitute 'AB *is*' for 'A is in part B,' when the particular proposition is interpreted under the conditions above-stated; and 'AB is not' for 'No A is B'. The symbolic expressions for these forms necessitate of course some symbol for the 'universe' and its absence, for which Miss Ladd employs, in common with some other writers, the mathematical forms ∞ and 0. But, as is pointed out, the introduction of a double copula symbol enables

us to make use of one only of these universe symbols, and the result is simplified by taking ∞ for this purpose, and (by taking it for granted) avoiding the necessity of actually introducing it into our equations. Thus, 'There is x' and 'There is no x,' being written in full $x\vee\infty$ and $x\overline{\vee}\infty$, we may take the latter symbol for granted and simply write $x\vee$ and $x\overline{\vee}$. When for x here we substitute a complex expression, *e.g.*, $x\bar{y}$, we obtain propositions which break up into the familiar subject and predicate form. Thus, $x\bar{y}\vee$ means 'There is x which is not y,' or 'Some x is not y'; and $x\bar{y}\overline{\vee}$ means 'There is no x which is not y,' namely, 'All x is y'.[1]

It should be remarked that the different symbols thus aggregated on the left side are necessarily commutative and transferable at will to the other side. Thus, for $x\bar{y}z\overline{\vee}$ which means 'There is no $x\bar{y}z$,' we may substitute such equivalent forms as $xz\overline{\vee}\bar{y}$, *viz.*, 'All xz is y,' or $x\bar{y}\overline{\vee}z$, *viz.*, 'No x which is not y is z,' and so on to any extent which the available number of permutations may permit. A large part of the essay is devoted to the exhibition and comparison of convenient equivalent or inferrible expressions founded on this leading idea.

The remarks already made about the expression of particular propositions naturally suggest the inquiry whether any perfectly general treatment of them is available, that is, corresponding in generality and brevity to those which Boole has given and which have been simplified in their practical employment by a succession of writers. I am inclined to think that it is not; at least I do not remember to have seen anything at all rivalling the completeness with which groups of universal propositions can be grappled with. The passage in which one would most expect to find the desired formulæ in the volume before us is at page 45, under the head of "Resolution of Problems". As the passage seems to me obscure, I quote it in full:—

"From a combination of universal propositions, the conclusion, irrespective of any term or set of terms to be eliminated, x, consists of the universal exclusion of the product of the co-efficient of x by that of the negative of x, added to the excluded combinations which are free from x as given. If the premisses include an alternation of particular propositions, the conclusion consists of the partial inclusion of the total co-efficient of x in the particular propositions by the negative of that of x in the universal propositions, added to the included combinations which are free from x as given."

The first part of this statement is simple enough. It is the

[1] The originality of treatment here consists mainly in the notation and certain consequences thereof. The general conception of forming a scheme of propositions by equating all the possible combinations of class-terms to 0 and *something*, has been suggested before. For instance, I have suggested such a scheme myself, on a plan modified with less departure from Boole's plan.

well-known rule, For $f(x)$ write $f(1)f(0)$, put into its simpler concrete form; for when $f(x)$ is represented as a logical expression involving x and not-x, it stands $Ax + B\bar{x} + C$, and the above formula becomes (regard had to the suggestions of simplification which Boole recommends) $AB + C = 0$.[1] But the latter sentence does not seem to me at all clear. Take a simple instance embracing one universal proposition, or resultant of several such, and one alternation of particulars. The fullest expression for the former, regard being had to any class-term x and its negation, is as above $Ax + B\bar{x} + C = 0$; or as Miss Ladd writes it $Ax + B\bar{x} + C\bar{\vee}$. The correspondingly full form for the latter would then be $Ex + F\bar{x} + G =$ something, or $Ex + F\bar{x} + G\vee$; *viz.*, it intimates that something comprised in this aggregate of class-combinations is to be saved. Now "the total co-efficient of x in the particular propositions" is here E, and "the negative of that of x in the universal proposition" is $\bar{A}$, and "the combinations which are free from x as given" are C and G, and by "partial inclusion" is meant combination into a particular proposition. According to this, the solution of the problem would be $E\bar{A} + C + G\vee$, if the "addition of the included combinations free from x" is to be carried out as when we are dealing with universals alone. But this clearly will not do. The rule may possibly be intended for the much simpler case of two such premisses as $Ax + B\bar{x}\bar{\vee}$, and $Ex + G\vee$. A value (not the full value) of x, determined from the former, is that it is $\bar{A}$: substitute this in the latter, and we should have $E\bar{A} + G\vee$, which answers to the rule given.

It may be worth while to digress from the present treatment for a few minutes in order to point out how we might attempt to represent diagrammatically the results of combining any number of universal propositions and any number of alternatives of particulars. I have suggested elsewhere a plan for thus representing any combination of universals by drawing a system of circles or other closed and mutually intersecting figures, and shading out all the compartments which are shown to be destroyed when the propositions are interpreted with the usual symbolic signification. If we introduce particular propositions also, we must of course employ some additional form of diagrammatical notation, just as the writers under notice find it neces-

[1] This formula is sometimes (as here) called Schröder's modification of Boole's formula of elimination. It hardly appears to me to deserve a distinct name. No doubt it seems at first sight, as Miss Ladd says, to differ from Boole's by the omission of the redundant terms AC and BC given by the multiplication of the factors $(A + C)(B + C)$ or $f(1)f(0)$. But Boole himself recommends (p. 130) the omission of such terms in the practical application of his rules. The simple fact is that the formula $f(1)f(0)$ is the most abstract or general form, and $AB + C$ the form suggested for adoption when our expression is one degree more concrete in its statement.

sary to employ two forms of copula. We might, for example, just draw a bar across the compartments declared to be saved; remembering of course that, whereas destruction is distributive, *i.e.*, *every* included sub-section is destroyed, the salvation is only alternative or partial, *i.e.*, we can only be sure that some of the included sub-sections are saved. Thus, 'No x is y,' leading to the destruction of xy, will destroy both xyz and $xy\bar{z}$, if z has to be taken account of. But 'Some x is y,' saving a part of xy, does not in the least indicate whether such part is xyz or $xy\bar{z}$. Thus, if we had the general alternative premiss that $Ax + B\bar{x} + C$ exists, this means that either there is x which is A, or not-x which is B, or that there is C. Draw a line of some recognisable kind through, or in any way put a mark on the list of elements included above, and the import of the proposition is complete when we are informed that some or other of their contents is to be reserved. We may then proceed to fill in all the information furnished by the universal propositions, by erasing the compartments with which they deal, and the full information of the combined propositions is represented to the eye. Of course, if several groups of such alternatives of particulars are given in the premisses we must employ a distinctive line or mark for each such group. If it were worth while thus to illustrate complicated groups of propositions of the kind in question, it could, I fancy, be done with very tolerable success.

Miss Ladd's paper is illustrated by a good selection of examples. Some of these are of considerable difficulty and complexity, and show very forcibly the progress that has been made within the last few years, as logicians have begun to acquire ease and dexterity in the manipulation of their rules and in the invention of intermediate formulæ and practical simplifications. They seem, so far as I have tried them, to be concisely and correctly worked out, and several of the devices adopted represent real simplifications in procedure.

The following minor points seem to me to call for revision or reconsideration. On p. 42, the example is certainly wrong, or else $\bar{x}$ has been written by mistake for x. On p. 27, it is maintained that the notation employed will suit the expression of negative propositions whether interpreted in extension or intension; "the proposition *no stones are plants* means that the objects denoted and the qualities connoted by the term *stone* are inconsistent with the objects denoted and the qualities connoted by the term *plant*". This seems to me a very misleading statement. The objects denoted are of course numerically entirely distinct, but in what appropriate sense they can be called "inconsistent," I cannot perceive, for each may necessarily imply the existence of the other, *e.g.*, 'No husbands are wives'. On the other hand, the qualities connoted are by no means necessarily distinct as wholes, the utmost we can say being that in one at least of the

two groups there must be some attribute which is not found in the other.

The second of the two principal papers on Symbolic Logic is by Mr. O. H. Mitchell, and seems to me one of the most valuable and original in the volume. Its fundamental method turns upon an ingenious modification of the Boolian plan of expressing propositions. Starting from the fundamental expression for the full development of a combination of two terms, $xy + x\bar{y} + \bar{x}y + \bar{x}\bar{y} = 1$, the import of a universal proposition is most usually read off as destroying one or more of these elements. Thus, 'All x is y,' or $x\bar{y} = 0$, expunges $x\bar{y}$, and so on with the others. But it is an exactly equivalent alternative form to say that the aggregate of the remaining elements constitute the logical universe, for $x\bar{y} = 0$ is obviously the same result as $xy + \bar{x}y + \bar{x}\bar{y} = 1$. So much is of course familiar to every student of the subject, but what I confess was new to me was the ease with which groups of propositions could be combined on this plan, and the fact that on this mode of procedure the process of multiplication corresponds to that of addition on the ordinary process; another of the interesting parallelisms which have been pointed out as existing between + and × in the logical algebra. Thus, if we take the two propositions 'All x is y' and 'All y is x,' they give $x\bar{y} = 0$, $\bar{x}y = 0$, and the combination of the two is given by *adding* the results. But when we equate the remainders to unity, or the universe, we must *multiply*, for $(xy + \bar{x}y + \bar{x}\bar{y} = 1) \times (xy + x\bar{y} + \bar{x}\bar{y} = 1)$ gives $xy + \bar{x}\bar{y} = 1$, which is of course the same as if we had added $x\bar{y} = 0$ to $\bar{x}y = 0$. The process, obvious in this simple case, admits of an easy symbolic generalisation. And this leads to a further development by which we may not only represent particular propositions but also combine them with universals. The notation adopted for this purpose is to write F_1 for $F = 1$, where F is any logical polynomial or aggregate of class-terms, so that that aggregate is declared to constitute the whole universe; and F_u for the assertion that F simply exists, that is, that some one or more of its constituent elements is represented as existent. The former therefore belongs to universal propositions and the latter to particular. A large number of derivative formulæ are then given, such as the following: $F_1G_1 = (FG)_1$, $F_u + G_u = (F + G)_u$, to quote two only of the simplest.

This method of procedure sometimes gives a decidedly more compact and convenient expression than the more familiar one, sometimes the reverse, according to the nature of the propositions dealt with; for as more elements have to be equated to zero the residue that have to be equated to unity, or the universe, become fewer. For instance, the expression on this scheme of 'No x is y' is decidedly more cumbrous, since we have to put it $(\bar{a} + \bar{b})_1$ *viz.*, to make it assert that not-a and not-b make up the whole.

The problem of elimination on this scheme becomes simple. It rests upon the same fundamental basis, of course, *viz.*, that

logical elimination is simply the dropping of irrelevant information, only here it assumes the form of expanding or widening the extent of any class term in the aggregate. For instance if xy and z together fill the universe, it is clear *à fortiori* that y and z together will do so, *viz.*, we may drop the constituent element x. The element z, which stands alone, cannot be thus dropped; or rather it must be regarded as (what it is) a constituent of 1, *viz.*, as $1z$, so that the elimination of z above would be given as $xy + 1 = 1$, which is of course a truism. This is expressed by saying "If F be a polynomial of the class-terms $a, b, c, \ldots x, y, z$, then x, y, z, may be eliminated from F by erasure, provided no aggregant term is thereby destroyed" (p. 80).

The best way of illustrating the peculiarities of this scheme of procedure and notation will be to take one of Mr. Mitchell's simpler examples as he does it, and to give the solution as it might be worked out on Boole's plan.

"What may be inferred independent of x and y from the two premisses 'Either some a that is x is not y, or all d is both x and y,' and 'Either some y is both b and x, or all x is either not y or c and not b'? (p. 85).

"The premisses are

$$(ax\bar{y})_u + (\bar{d} + xy)_1,$$
$$(bxy)_u + (\bar{x} + \bar{y} + \bar{b}c)_1.$$

"By multiplication we get

$$(ax\bar{y})_u(bxy)_u + (bxy)_u + (ax\bar{y})_u + (dx + \bar{d}\bar{y} + \bar{b}c\bar{d} + \bar{b}cxy)_1.$$

"Whence, dropping x, y, and reducing, we get

$$(b + a)_u + (\bar{d} + \bar{b}c)_1$$

which may be interpreted in words, 'There is some b or a, or else all d is c and not b'."

The Boolian process is not at its best in dealing with particulars and hypotheticals, but, as it happens, this example yields little difficulty. Merely premising that 'Either α is β or γ is δ' means 'If α is not β, γ is δ,' and that this may be expressed $\gamma\bar{\delta}(1 - \alpha\beta)$, the premisses stand,

$$d(1 - xy)(1 - ax\bar{y}) = 0$$
$$xy(1 - c\bar{b})(1 - bxy) = 0,$$

or, more simply,

$$d(x\bar{y}\bar{a} + \bar{x}) = 0$$
$$xy\bar{b}\bar{c} = 0$$

The elimination of x gives at once $y\bar{b}\bar{c} + d\bar{y}\bar{a} = 0$, and that of y gives $d\bar{a}\bar{b}\bar{c} = 0$, *viz.*, 'All d is either a or b or c'.

Mr. Mitchell's result is in reality the same as this, but it is expressed with needless prolixity. To say that 'There is some b or a, or else all d is c and not b,' is to say that 'If there is neither b nor a then d is c and not b,' and under these circumstances it it clearly needless to say that d is not b.

In addition to the essays which we have thus noticed, there are several others all of them deserving of study. Dr. Marquand

contributes two: one of these describes a mechanical device for representing certain syllogistic results; and the other contains an account of the Epicurean system of empirical logic as this has been recovered from certain fragments of MSS. at Herculaneum, the substance being taken from the monographs of Gomperz and Bahnsch. Mr. Gilman contributes a paper upon the intricacies of the Logic of Relatives, that is, which deals with propositions not involving mere predication in the way of class-relation, but relation generally. The most interesting paper philosophically is the concluding one by Mr. Peirce himself. It deals with the nature and foundations of statistical reasoning and the mutual connexion between Probability and Induction, but it is too long and intricate to admit of a brief summary. It supplies an element which is somewhat missing in the other papers; for whilst the younger authors write more as mathematicians who have turned to the consideration of logical formulæ, Mr. Peirce is well acquainted with the history of the subject, and realises more clearly what are the special characteristics to be looked for in a symbolical or algebraical treatment of Logic.

J. Venn.

The Elements of Logic. By T. K. Abbott, B.D., Fellow and Tutor of Trinity College, Dublin. Dublin: Hodges; London: Longmans, 1883. Pp. 102.

It is impossible to read this little treatise without arriving at two conclusions: first, that the author is a master of his subject, namely, Aristotelian Logic; and, secondly, that his work has been to a great extent injured by following too closely the outlines of Dr. Murray's treatise on the same subject, which forms the present text-book of the University of Dublin. Of that work Sir W. Hamilton wrote, just half a century ago, that while Cambridge was dependent on a treatise which dispensed "a muddy scantling of metaphysic, psychology and dialectic," "Dr. Murray's *Compendium Logicæ*, the Trinity College text-book, may show that matters are if possible at a lower pass in Dublin" (*Discussions*, p. 123). Had the great logician seen Walker's Commentary, which largely aggravated the faults of the original work, he would doubtless have omitted the "if possible". It is only now, however, that the University authorities are beginning to become alive to the fact, which has long been somewhat rudely expressed by the students, that the Provost and Mathematician whose work has been studied for nearly a century was (as regards this subject at least) not up to the mark; and, seeing that Mr. Abbott, like Mr. Walker, can write the magic words "Fellow and Tutor" after his name, it may be confidently hoped that the reign of Murray is at an end, while perhaps after the lapse of

another half-century some other "Fellow and Tutor" may carry the subject a little beyond the point at which Mr. Abbott has dropped it.

Mr. Abbott defines Logic as "the Science of the Form of Thought," but as he gives no explanation of the important words "Science" and "Thought," the reader is not very much assisted by the definition. Form, he is indeed told, is the invariable part of anything while Matter is the variable part—an explanation which will probably suggest to him the question: If thought invariably conforms to the rules laid down by logicians, how can there be such a thing as a fallacy? A bad definition, however, often forms, as in the present instance, the introduction to a good treatise. Some portions of the work, however, seem to me obscure and confused, mainly I believe owing to the fact that the writer travels in the beaten track far beyond the point to which his own convictions (if exercised independently) would lead him.

Mr. Abbott, for instance, correctly describes a Definition as "a statement of the connotation of a term" (p. 11). But this description is almost immediately lost sight of. His first rule is that a definition must be "adequate, that is, its extension must be exactly equal to that of the term defined" (*Ibid*). The adequacy of a definition evidently consists in its stating the connotation, the whole connotation, and nothing but the connotation; if which is done, the extension may be safely left to take care of itself. Mr. Abbott himself, moreover, has elsewhere noticed that identity of extension is no proof of identity of connotation, and therefore no proof of the adequacy of a definition (pp. 6, 7). Another of his rules for definition is that "if possible" it should not be by negative attributes. The true rule here is that all the attributes comprised in the connotation should be set out whether they are positive or negative. He then adds that "definitions of natural objects, or kinds of things such as we know by experience, can never be complete," because they "possess an indefinite number of attributes in common" (p. 12). Surely the author does not mean that the connotation of the name cannot be exhausted because the common properties of the things denoted by it are inexhaustible. It is true, as he says, that names often change their connotations. Definitions may not for that reason be final; but finality is one thing and completeness is another. A little of the same confusion creeps into his language when explaining Division. "We might divide Book," says he, "according to contents, into histories, novels, &c." The passage would be rendered more intelligible (as well as more correct) by writing "books" instead of "Book". In no intelligible sense is the extension of a concept (or notion) identical with that concept or with any part of it.

That the old rules of Syllogistic inference require amendment may I think be conceded; but the proper way to amend them is not to lay them down in the old terms, and then to inform the

reader that they are not universally true. This, however, seems to me to be what Mr. Abbott has done in the case of an Undistributed Middle. He tells us (p. 44) that though we cannot draw any conclusion in extension from premisses with undistributed middle, " we may sometimes draw an inference in Attribution " (which latter term occurs here I believe for the first time without any explanation). He gives as an instance, " Men have eyes : insects have eyes: therefore men have some attributes in common with insects ". If Mr. Abbott had formulated this class of inferences and qualified the rule against Undistributed Middle so as not to conflict with them, he would have done something for the science of logic; but, as the observation stands, it is more calculated to perplex than to assist the reader—more especially as Mr. Abbott seeks to prove the general rules of syllogism by an appeal to common sense without the aid of any axioms.

Our author would, I suspect, have adopted the Quantification of the Predicate far beyond what appears in this work if left free to exercise his own judgment; but the effect of what he has done in this respect will be, I fear, merely to leave his reader in an uncomfortable state of doubt as to whether the predicate of an affirmative proposition is particular or universal. And in some of his examples the common system is curiously mixed up with the Hamiltonian. Thus he gives " A is equal to B " as an instance of an affirmative proposition which is simply convertible (p. 38). It is so in Hamilton's system, where the copula may be always rendered by " is equal to ". But in the ordinary system " is equal to " is not the copula simply but the copula together with a portion of the predicate. In this system the simple converse of " A is equal to B " is " That which is equal to B is A " or " Everything that is equal to B is A "—a proposition which does not follow from the convertend since other things besides A may be equal to B.

I have already dealt with this work at greater length than I should have done, if it were not likely to become the text-book of the principal Irish University, and I have dilated on its defects rather than its merits (which are by no means inconsiderable) for the same reason. But I cannot refrain from observing that if brevity is the soul of wit it certainly is not the soul of explanation. It is, I think, high time that *Reductio ad impossibile* should disappear from treatises on Logic, but even the advanced student will have some difficulty in comprehending Mr. Abbott's reasons for its exclusion (pp. 61-2). And when comprehended I doubt whether they are sound. In every syllogism the truth of the conclusion depends on the hypothesis that the premisses are true, and if this hypothesis is sufficient to render the reasoning hypothetical, every syllogism is a hypothetical syllogism. But if the distinct existence of the categorical syllogism is conceded, where is the material difference between showing that the conclusion is true on the hypothesis that the premisses are true and showing

that one (at least) of the premisses is false on the hypothesis that the conclusion is false? Truth or falsehood in both cases is hypothetical, but in both cases there is one element that is not hypothetical and that element is the sequence. Mr. Abbott's objection, however, was probably suggested by Dr. Murray's incorrect description of *Reductio ad impossibile*, in which the absolute truth of both premisses is assumed.

One more remark in conclusion. Mr. Abbott is, I think, perfectly justified in objecting to the reduction of hypothetical to categorical propositions, if such a reduction was ever seriously proposed (p. 71). They are in most cases really distinct. But it is a totally different question whether the logician may not throw hypothetical propositions into the categorical form, when treating of syllogisms, in order to show the identity of the reasoning process in the two cases. Mr. Abbott, I think, would admit this identity. If so, why should not the logician introduce for that special purpose the only reduction which can render the identity of the two processes manifest to the reader—which shows, for example, that inferring the truth of the antecedent from that of the consequent in a hypothetical proposition is the very same fallacy that has been already signalised as Undistributed Middle in the case of categorical syllogisms. Hypothetical propositions are really distinct from categorical propositions, but hypothetical reasoning is not really distinct from categorical reasoning: or, if I am to adopt Mr. Abbott's phraseology, simple syllogisms and complex syllogisms are merely two forms of the same process. The materials may be different but the inference in both cases depends on the same principles.

W. H. S. Monck.

Hume-Studien. II. Zur Relationstheorie. Von Dr. Alexius Meinong, a. ö. Professor der Philosophie an der Universität in Graz. Wien: Gerold's Sohn, 1882. Pp. 182.

The results of Dr. Meinong's investigation of the theory of Relation are presented as a development of the treatment by Locke and Hume of the same subject, not so much on account of the agreement of some of these results with particular doctrines of those thinkers, as on account of his use of the method of research employed by them. This method is "the empirical method of psychological analysis," introduced by Locke, "the Aristotle of the new psychology," and carried further by Berkeley, Hume, and the English school in general. Dr. Meinong regards it as, in the last resort, the only method that the psychologist can command. He defends Locke's position against the Kantian objection that, from his own point of view, he had no right to have either a theory of knowledge or a theory of relation. In the theory of relation, as well as in his other psychological in-

vestigations, Dr. Meinong holds that Locke has laid the foundations; for others it has only been left to add the superstructure. Locke's theory of knowledge is, he says, one of the most important results that the history of philosophy has to show.

The closeness of the connexion of Locke's theory of relation with his theory of knowledge is pointed out in a chapter dealing specially with Locke. It is shown that his theory of knowledge is a development of his theory of relation, and that although he nowhere explicitly identifies knowledge with the perception of relations he often does this implicitly. Locke's theory of knowledge is, however, erroneous in many respects, but especially as regards judgments about real existence. Thus it was in need of the corrections of Hume, who has not only brought out clearly what is implicit in Locke,—the significance of relations for the theory of knowledge,—but has seen that judgments about real existence must be placed in a class by themselves, that they differ fundamentally from the judgments that constitute intuitive and demonstrative knowledge. Hume's classification of relations deserves attention as the foundation for this important distinction. It is, besides, a step forward in psychology, for it is the first attempt that has been made to classify relations exhaustively.

Before criticising Hume's classification, Dr. Meinong discusses the definitions of "relation" and "foundation of relation" that have been given by J. S. Mill (both in the *Logic* and in a note to his father's *Analysis*) and by Mr. Herbert Spencer. His own positions are that the *fundamentum relationis* is nothing but the related feelings themselves, and that a relation is, as Lotze says, a product of the psychical activity excited in the subject by the impressions that are its foundation. There can be no relation without two foundations. These may be themselves relations; but we cannot go on making relations the foundations of relations to infinity; every relation has for its ultimate foundations feelings that are not themselves relations.

The criticism of Hume's classification shows clearly its defects. At the same time a study of the divisions of Hume gives suggestions for a more accurate classification. In the next place, the classifications of James Mill and of Mr. Spencer are discussed. The first of these is not considered in detail, but Mr. Spencer's treatment of relations in the *Psychology* is submitted to a careful examination. Dr. Meinong contends that the derivation of all relations from that of difference or sequence is not psychologically proved; that it is a hypothetical application of the doctrine of evolution, and that other reductions—for example, a reduction of all relations to that of likeness—might be made on the same ground with equal plausibility.

Dr. Meinong divides relations into two fundamental classes, relations of Comparison (*Vergleichungsrelationen*), and relations of Compatibility (*Verträglichkeitsrelationen*). The former class is divided into relations of likeness (*Gleichheit*) and of unlikeness or

difference (*Ungleichheit*, *Verschiedenheit*), which is not to be regarded as the mere negation of likeness. All other relations of comparison, such as (imperfect) resemblance (*Aehnlichkeit*) and its opposite, are combinations of these. Relations of space and time come within this class. Their foundations are like and unlike space- and time-determinations in (subjective) space- and time-continua. Relations of compatibility and incompatibility are based on likeness of space- and time-determinations. When we cannot think of two physical or psychical qualities as having like determinations in space or time there is a relation of incompatibility. The relation of compatibility is the negation of this relation. Necessary coexistence is reducible to a relation of incompatibility. No attempt to reduce this class of relations to empirical data has been successful. Incompatibility of representations must therefore be accepted as an ultimate fact.

The relations of Causation and Identity are considered separately. The negative results of Hume as to causation are accepted. Dr. Meinong's positive view of causation is, as he himself points out, essentially that which is set forth in Mill's *Logic*. With regard to identity it is shown that "this relation also requires two foundations". "Identity without difference of time-determination" may be asserted of anything, in so far as it is capable of being in relation with more than one thing at the same time; the assertion of identity means that there is question of one thing and not of two or more. "Identity with difference of time-determination" is shown to admit of an analogous explanation.

Hume distinguishes between those relations that depend entirely on their foundations and those that change independently of their foundations. This is the distinction that has already been referred to as so important for the theory of knowledge. We may call the relations of the first class "pure," those of the second "empirical". Those that belong to the fundamental classes (relations of comparison and compatibility) are pure relations; the relations of causality and identity are empirical relations. In the case of the last two relations it is impossible to confine our attention to objects of representation. We must also take into account the reference to things, to real existence.

With regard to Hume's sevenfold division of relations in the *Treatise*, the final results are that "resemblance" is a relation of comparison, to which "difference," supposed by Hume to be derivative, must be added as another irreducible relation of the same class; that three of Hume's classes (relations of "space and time," "quantity and number," and "degrees of quality"), since they are not determined by the nature of the relation, but by the nature of the foundations, may be subsumed under both primary classes; that "contrariety" is an arbitrarily selected case of incompatibility; that "identity" and "cause and effect," being "determinations of the simple cases already known to us with a view to definite practical ends," are secondary relations.

The distinction of primary and secondary coincides with that of pure and empirical relations.

All relations are necessarily at the same time judgments, though in some cases their aspect as judgments may be left out of sight. The pure relations are *a priori*, for they are products of a psychical activity that is excited by the mere presence of the feelings compared. Since they are at the same time judgments they constitute knowledge *a priori*. But no judgment about real existence is *a priori*.

Relations that are the result of the comparison of objects of representation are themselves representations. They must be placed in a class apart, for they belong neither to Locke's "ideas of sensation" nor to his "ideas of reflection"; nor can they be placed among Hume's "impressions". It may be objected that to admit such a class of representations is contrary to the empirical tradition. Dr. Meinong replies that it is not essential to the empirical doctrine that there should only be two ways of acquiring representations, that of receiving impressions and that of copying them. The doctrines of Mental Chemistry and of Association as they have been developed by the English empirical school, are inconsistent with the positions of Locke and Hume as to the origin of representations, but no one has thought of making this an objection to those doctrines.

All the relations that are considered in detail in the present volume are called by Dr. Meinong "ideal relations," to distinguish them from another group to which he gives the name of "real relations". The relation between representation and content of representation, both of which are necessarily thought of as realities, is a real relation. Ideal relations on the other hand are relations between objects of representation, which may or may not be thought of as realities. Another ground of distinction is that real relations are passively perceived while ideal relations are products of psychical activity.

It is obvious that the term "real" here does not refer to an extra-psychical reality. None but ideal relations are "carried over into the external world". And again, in speaking of an external world, of a real existence to which the (ideal) relation of cause and effect, for example, is applied, of "comparison of substances," &c., Dr. Meinong always intends to express some psychological fact, not to imply acceptance of realism. His view is that the psychologist, whether he is himself an idealist or a realist, cannot get beyond the idealistic position in his treatment of problems such as those which form the subject of the present study.

The attitude of the empirical psychologist, which is maintained consistently by Dr. Meinong throughout, gives a special interest to his study. We learn from him how far it is possible to proceed in the analysis of a group of mental phenomena by this method alone, without the aid of any theories from physical science.

But the interest of his investigations is quite as much in the details as in the general results, and thus it becomes difficult to give an idea of their value by a mere outline. The compression of Dr. Meinong's treatment adds to the difficulty of doing this. In many cases the purely psychological method seems to lead to the best results that can be attained at present. With regard to the question of causation, however, this method taken alone does not seem so satisfactory as with regard to some other questions. That "the old historical difficulties as to the action of body on mind or mind on body, &c.," are all removed by considering the relation of cause and effect as one of necessary and immediate succession (the "emptiness" of this conception permitting its application to any pair of ideas whatever), is scarcely an argument in favour of this view, if the idea of cause is to be in agreement with modern physical conceptions. And it seems difficult to avoid the conclusion that "the scientific conception of cause" ought to be taken from the more developed sciences, such as mechanics and physics. Now in these sciences is not the conception of causation as a kind of sequence giving place to the conception of the identity of "cause" and "effect"? But the question of causation may perhaps be considered by Dr. Meinong in more detail in the fuller treatment which he promises of the theory of Relation.

THOMAS WHITTAKER.

Sancti Thomæ Aquinatis, Doctoris Angelici, Opera Omnia, jussu impensaque Leonis XIII., P.M., edita. Tomus Primus. *Commentaria in Aristotelis Libros Peri Hermeneias et Posteriorum Analyticorum*, cum Synopsibus et Annotationibus Fr. Thomæ Mariæ Zigliara, Ordinis Prædicatorum, S.R.E. Cardinalis. Romæ. Ex Typographia S.C. de Propaganda Fide, 1882.

The Germans have a very happy way of designating what frequently happens, and perhaps must happen, in this hasty world of ours, the uncompromising and wholesale rejection of a thing or a system, which, though containing much that is of great value, has been so abused as to have rendered itself obnoxious in practice. They call this *Das Kind mit dem Bade ausschütten* —To empty out the baby with the bath. Now this is exactly what the spirit of Freedom, that took shape in the Protestant Reformation and in modern philosophy, did with Scholasticism. That system, the result of the combined labours of the best intellects in Europe, carried on unceasingly for five hundred years, could hardly have been the mere mass of fruitless hair-splitting which it is now for the most part considered to be by modern thinkers, who, as a rule, know very little about it. Very far from it! Scholasticism worked out into clearness some of

the most weighty and far-reaching of philosophical truths—truths which men can ill afford to let slip either from thought or life,—and it imparted to the intellect a training which has perhaps never been equalled, and for which we look in vain among the adherents of that philosophy which took its place. Unfortunately, however, it had allied itself with an oppressive religious system, which sought to subordinate intelligence to faith and authority, and so to make men and nations the bond-slaves of irresponsible masters. This alliance was fatal to it: it was included in the proscriptive decree issued by the spirit of Freedom against Catholicism and all that abetted it. This was, no doubt, a species of intellectual vandalism, as deeply to be regretted as that which tore down grand old cathedrals and abbeys; but it was less avoidable and, in the end, much less irreparable. No doubt, if we could enter into the feelings and conditions of the men of the sixteenth and seventeenth centuries, we should find justification for this, as well as for much else that, to our calm, critical eyes, now appears ruthless wantonness. At the same time, the circumstances that justified them in trampling upon Scholasticism, which to them had become an instrument of oppression, does not justify us in following their example, now that Scholasticism has become as harmless as Papal bulls. The once mighty system that sought to strike human freedom at its roots is practically overthrown, and we can now afford to be just to what was true and good in it, and therefore, to what is true in Scholasticism.

Scholasticism cultivated a well-defined field of thought—the field of Being. This extensive field is naturally barren, and it took all the patience of self-denying, world-scorning monks to draw any grain whereby a man could live from its eternal rocks. But grain they did draw, grain of the most nourishing kind, and they fed their souls with it, and lived in blessedness. Modern Philosophy, on the contrary, turning its back upon Scholasticism and its labours, has devoted itself almost solely to cultivating the field of Becoming, and so much is its attention occupied with this that it either declares that the field of Being does not exist, or that, if it does, it never has been, and never can be, cultivated. This is what it means when it says, as it so frequently does, that there is no such thing as a Science of Ontology.

Now a Science of Ontology, however unfashionable it may seem to say so, is just what modern thought wants, in order to lift it out of the low estate of mere rude sensism—Hegelian or Comtian—into the condition of a true philosophy. It is pitiful to hear men who have followed earnestly in the track of modern thought declaring that, with their deftest efforts, they cannot discover a subject or an object of thought, that all they find is phenomena, appearances of nothing appearing to nobody, or that the universe consists solely of relations which relate

nothing. And yet, if there be no Science of Ontology, that is, if being cannot be known in such a way as to be distinguishable from nothing (if it can be so known, there is a Science of Ontology, however narrow), these men are unquestionably right, and science is a mere dream of a dream dreamt by—Zero. But science, in fact, is no such thing, and no man, in his sane senses, believes anything of the kind. It is only that a false, one-sided and reactionary philosophy, through pure caprice refusing to recognise one very important region of thought, makes it impossible to justify to reason what reason knows perfectly well to be true and constantly acts upon. This region is Being—the field of the Science of Ontology. The next step, therefore, that modern thought must take, if it does not mean to retrograde or stand still, is in the direction of Ontology, taking up that science at the point where the Schoolmen, or those more recent men that continued to pursue their path, left it.

This fact renders it desirable that the works of the great Schoolmen should at this time be brought prominently before the philosophic world, in editions answering to the critical demands of modern philology; and it is, therefore, a fortunate thing that the Dominican and Franciscan orders are each bringing out, in an edition of this kind, the complete works of its most illustrious thinker, the former those of St. Thomas of Aquino, the latter those of St. Bonaventura (John Fidanza) of Bagnorea.

Of the works of St. Thomas the first volume is before us, a very handsome folio of nearly 800 pages, of which 348 are occupied with introductory matter. First comes a dedication to the Pope, then the text of the Encyclical, *Æterni Patris*, whereby the Pope restored the study of St. Thomas in the Church, then three other shorter papal documents of similar tendency, then the editor's preface, then Echard's life of St. Thomas, and then De Rubeis's *Dissertationes Criticæ et Apologeticæ*, occupying over 300 pages. Then follow the Commentaries on the Περὶ Ἑρμηνείας[1] and Ἀναλυτικὰ ὕστερα of Aristotle with copious critical, exegetical, and polemical notes by the editor.

The most objectionable thing in the whole volume is the dedication, which breathes a spirit of the narrowest, most uncharitable and most misrepresenting bigotry. That it should have been accepted by the Pope shows how much reason we have to congratulate ourselves that the Papacy has been rendered harmless and what we might expect from it, if ever it should have the power to be otherwise. Here are a couple of sentences from it:—

"When in the sixteenth century, the Lutheran pestilence broke out, nefarious men, hurried on by revolutionary lust, opposed the Catholic truth, having (as is the wont of heretics) licentiously

[1] St. Thomas's Commentary on this work is incomplete; but is supplemented in the present edition by the continuation written by Cardinal De Vio, his most subtle interpreter.

interpreted the sacred writings by the glimmer *(igniculo)* of human reason and a depraved will." . . . "The Lutheran views, which, having long crept through the veins of Europe, had penetrated deep into the minds of many, at last, changing name and form, gave birth, through force of logic, to that monstrous doctrine, which, despising and even rejecting the word of God, places its whole confidence in the weakness of human reason; and so it has come to pass that in the nineteenth century we are forced with sorrow to behold an open and most barbarous war waged against Christ, the Church and God Himself." If this is a specimen of the spirit of Christ and of the Church, the war is assuredly a most just one.

The Papal documents having reference to the restoration of Thomism as the Philosophy of the Church are marked by much moderation, and show that the Pope has a clear appreciation of the conditions of the Church's authority. He sees plainly that reason, left to develop freely, is of necessity fatal to this authority, which can be maintained only on condition that a source of truth be admitted, to which reason is a mere handmaid; and he fondly thinks that St. Thomas, who did so much to rescue faith in the thirteenth century, will be able to perform the same service in the nineteenth. One need not hesitate to admit that, if St. Thomas cannot do this, no one can. But objections, even of a philosophical kind, are in our day raised against faith, such as St. Thomas never dreamt of, and therefore, could not provide against; and, besides these, there is the whole host of objections offered by historical criticism—objections which no philosophy can answer. If the Doctors of the Church would just once make plain to trained understandings that what they call the word of God is in very truth such, they might even dispense with philosophy altogether.

In his Preface, the editor enumerates the various previous editions of St. Thomas's complete works, giving preference to the so-called *Editio Piana*, published in 1570, under the auspices of Pope Pius V. He finds, however, that this edition, contrary to what is usually supposed, is in many points defective, the editors having made up their text from older editions of the separate works rather than from the manuscripts. In the present edition, the *Piana* has indeed been made the basis of the text; but numerous changes have been introduced on the authority of manuscripts collected from all parts of Europe and collated with the utmost care. The editor goes on to point out the new features of this edition, of which we shall speak further on, and to inform us that the order in which the works are arranged in it is the scientific one, and neither the chronological, which would now be impossible to discover, nor that of dignity, which would be very awkward for the student.

The life of St. Thomas, by Echard, is brief, occupying only about two pages, but contains nearly all that is known with

certainty respecting its subject. It is made up exclusively of facts, and has none of that mawkishness that is so common in the "Lives of the Saints," written for edification rather than instruction.

The thirty-two Dissertations of De Rubeis have very various subjects. The first discusses at great length the question whether St. Thomas was a Benedictine before he entered the Dominican order, and comes to the conclusion that he was not. Those from the second to the twenty-fourth, inclusive, discuss the genuineness of the various works attributed to him, and leave one with an uncomfortable impression that many of these are quite as likely to be by followers of the Saint as by himself. Those from the twenty-fifth to the thirty-second defend the orthodoxy and scholarship of the Saint against aspersions cast upon them from various quarters. Throughout these last there is displayed a tendency to prove St. Thomas faultless and right at all hazards. Nevertheless, many of these dissertations are very interesting reading and make us regret that monkish leisure is well-nigh a thing of the past.

This exhausts the preliminary matter, no part of which is due to the editor except the brief preface of less than five pages. This is much to be regretted, because Cardinal Zigliara is so well versed in the philosophy of St. Thomas that, had he chosen to write an introduction to the whole work, he could hardly have failed to contribute much to the understanding of that system. Against the dissertations of De Rubeis there is nothing to be said. They are valuable as far as they go; but they fail to do two most important things, which might very properly have been done in a preface. (1) They fail to show the relation of Thomism to previous systems. This is a great defect; because the real merits of Thomism, as a system, will never be clearly understood, until its relation to ancient philosophy, and especially to Aristotelianism, is completely settled. Catholics, as a rule, very much underrate the influence of "the Philosopher" upon St. Thomas, and try to show that the latter was much more original than he really was. Examples of this underrating, which is due in some degree to the fact that Catholics are very rarely well acquainted either with Greek or with Aristotle, may be seen in two recent works, Talamo's *Aristotelismo nella Scolastica* and Schneid's *Aristoteles in der Scholastik*, both otherwise valuable. (2) They fail to show the relation of Thomism to modern thought. Now, if there be anything that one would have expected to find in the introduction to a philosophy intended to correct and remove the errors into which men have been led by recent thought, it is a clear statement of these errors and the manner in which that philosophy might be expected to counteract them. A most interesting and important treatise might be written on the defects of modern thought due to the rejection of the great truths which Scholasticism had evolved—truths, which,

if properly handled, might still remedy these defects. Materials for such a treatise might easily have been gathered from the works of Rosmini, with which Cardinal Zigliara is apparently not unacquainted.

The Commentaries on Aristotle's *De Interpretatione* and *Later Analytics*, which occupy the rest of the volume, are edited with great care, and encourage the hope that the whole of the present edition of St. Thomas will be much superior to those that have preceded it. Several new features are here introduced. (1) Instead of the two Latin versions of the text of Aristotle placed at the head of the different *Lectiones* in the old editions, we have here the original Greek text of Aristotle and one Latin version, the so-called *antiqua*, which St. Thomas probably used. This is a great improvement, because it enables the student to see at a glance how the Saint understood Aristotle, and where he was led astray, as he sometimes was, by a false translation and the meagreness of the Latin tongue. The Greek text is that of the Paris edition of Aristotle, corrected by comparison with the editions of Waitz and others. Any changes that have been introduced seem to have been made with the view of bringing the Greek text more into accordance with the Latin rendering. This is especially true with respect to punctuation. With respect to the Latin version the editor says:—"Quoad versionem textui præfigendam non est electioni locus. Quæ enim fuerit versio qua usus est S. Thomas, nobis non constat: codices nostri versionem nullam habent præfixam Commentariis. Hinc antiqua versio, quæ generatim est ipsa versio Boethii aut integra aut parum immutata, quæque habetur in edd. Venetis Sæc. XV. et 1526, nec non in Piana, quoad libros Periher. et Poster. Analytic. erat retinenda. Eam tamen comparavimus cum præcitata versione Boethii et præcipue cum littera S. Thomæ, ut saltem sphalmata majoris momenti lector non offenderet" (Præf. p. xxxviii.). (2) The text of the commentary is divided into numbered paragraphs, which greatly facilitates reference. (3) Each *Lectio* is preceded by a brief and careful synopsis, with numbers corresponding to those of the paragraphs. (4) The commentaries are furnished with extensive notes, critical, exegetical, and polemic. Besides these new features, there are two others not altogether new, which deserve to be noticed: the various readings are placed on the margin instead of at the foot of the page; and the letters referring to the notes are placed both in the text and upon the margin opposite.

Of course, by far the most important of all these features is the Editor's notes. We cannot profess to have read the whole of them; but those which we have read are for the most part both learned and judicious. This is especially true of the critical and exegetical notes; less so of the polemical ones. And this is intelligible enough. St. Thomas was not always right, and any attempt to show that he was so must necessarily fail. In this

respect we can only admire the words of the Papal Encyclical: —" Si quid enim est a doctoribus Scholasticis vel nimia subtilitate quæsitum vel parum considerate traditum, si quid cum exploratis posterioris ævi doctrinis minus cohærens, vel denique quoquo modo non probabile, id nullo pacto in animo est ætati nostræ ad imitandum proponi." So long as Card. Zigliara is combating Kantianism, Hegelianism, or Evolutionism, he has a pretty easy task; for these philosophies must always seem unsatisfactory to any one well-skilled in Logic; but when he comes to Rosmini, the most he can do is to make it seem that that philosopher is at variance with St. Thomas, without showing that he is wrong. Indeed, it may be said that, when St. Thomas and Rosmini agree, they may both be wrong, but when they differ, the latter is almost certain to be right. In regard to the point on which the editor tries to show discrepancy between the two, the truth is that St. Thomas had no settled theory. He appears to have held different views on it at different parts of his life; and this leads us to say that the same is true in regard to many points. This is a fact that all modern Thomists seem to ignore. They speak as if St. Thomas had settled all his views, before he began to write. Consequently, when they find contradictions in his writings (and these are not rare), they try, by what they call a "benign interpretation," to explain them away. Unfortunately, a benign interpretation generally means a disingenuous interpretation, and how far such interpretations may be carried may be seen in a little work by Father Cornoldi on St. Thomas's views with regard to the Immaculate Conception, in which that zealous Jesuit tries to show that St. Thomas meant exactly the opposite of what he said. The Saint's views on the Immaculate Conception were anything but orthodox. It is but fair to say that Card. Zigliara, in the volume before us, shows no tendency to benign interpretations, and that he treats his opponents, when speaking of them individually, with becoming respect.

We have to note that the Greek, both of the texts commented upon and of the foot-notes, contains a good many misprints, showing carelessness on the part of the proof-corrector.

In conclusion, we can only repeat what we said at the beginning, namely, that these Commentaries of St. Thomas, and his works generally, are well deserving of careful study, as a supplement and corrective to the too exclusively phenomenal philosophy of our time. A clear presentation of Scholasticism in its valuable features is an *opus desideratissimum*, even after the labours of Erdmann, Ueberweg, and Stöckl, and a task that any scholarly philosopher might be proud to undertake.

THOMAS DAVIDSON.

VII.—NEW BOOKS.

[*These Notes do not exclude Critical Notices later on.*]

Kant's Prolegomena and Metaphysical Foundations of Natural Science. Translated from the Original, with a Biography and Introduction, by Ernest Belfort Bax. With a Portrait of Kant. London: Bell & Sons, 1883. Pp. xix., 254.

This volume is welcome as including, besides a handier or at least a much cheaper translation of the *Prolegomena* than was previously to be had, the first English rendering of Kant's important constructive work, *Metaphysische Anfangsgründe der Naturwissenschaft.* We have not been able to compare Mr. Bax's *Prolegomena* with Prof. Mahaffy's, but think he was well justified in attempting anew the task of translation. The result is satisfactory, though there are passages where his plan of "giving, as far as possible, the *ipsissima verba* of Kant" might without disadvantage have been still more closely adhered to. Mr. Bax, like his predecessor, while referring to Richardson the predecessor of both, has nothing to say of Thomas Wirgman, whose article 'Metaphysic' in the *Encyclopædia Londinensis* was the earliest attempt, and a far worthier than Richardson's, to make the *Prolegomena* known to English readers. The biography and appreciation of Kant which fill nearly a third of the present volume, give evidence of independent reading and study, but have for the most part been anticipated.

An Examination of the Structural Principles of Mr. Herbert Spencer's Philosophy: Intended as a Proof that Theism is the only Theory of the Universe that can satisfy Reason. By the Rev. W. D. Ground, Curate of Newburn, Newcastle-on-Tyne. Oxford: Parker, 1883. Pp. xvi., 346.

The title of this work, which might be easily misunderstood, is thus expanded by the author in his Preface:

"This volume is written for the purpose of showing that, if the system [of Mr. Spencer] be made one logical and consistent whole, it is congruous with nothing but Theism. I have also attempted to show that the system when thus made consistent with itself, affords a scientific demonstration of the truth of the Theistic hypothesis which is of a higher and more convincing character than has been presented to any former age."

No words are too strong for his admiration of "Mr. Spencer's intellectual edifice": "it has an intellectual majesty rivalling the framework of the heavens". He finds accordingly that it has got scant justice from such hostile critics as Dr. Martineau,

the late Prof. Birks, and Mr. Mivart. It involves, indeed, three serious contradictions: but let it be granted (1) that "Force is of the order of Mind as well as of Matter and is guided by intelligence"; (2) that "each Ego is a distinct Personality, is a living Mind, underlying—forming the substratum of—those transitory states of mind which occupy consciousness"; and (3) that the Will is free, or, in other words, "that the immaterial ego guides and controls the material nerve-currents";—nothing hinders then that the genuine theistic character of the system should be rendered fully manifest. At the end of his task, the author even declares that "it would not surprise" him to learn that Mr. Spencer, "with Mr. Darwin, is regarded by our Lord as He regarded Cyrus, the needed agent for the building of the second Temple,—and that as such his system represents some vast idea which Christ intends to make structural in his church". Nor should it be supposed that the author leaves out of sight those parts of the system that have not before suggested to anybody that Mr. Spencer had just such a 'call'. He is well aware that others have put a different interpretation on many of the philosopher's views, and is at pains to set them all honestly forth. His *Examination* is thus not without its significance; and the imposing list of Church-dignitaries, headed by His Grace of York, figuring in front as subscribers to the work, gives promise that the novel interpretation will receive attention.

First Lessons in Philosophy. Being an Introduction to Metaphysic and Logic for Beginners. By M. S. Handley, Lecturer on Moral Philosophy. London: Laurie, 1883. Pp. viii., 59.

The author, in six dialogues with a pupil, seeks to explain some of the fundamental conceptions of philosophy, as set forth by Mr. Shadworth Hodgson, more especially in his first work *Time and Space*. The topics selected are Subject and Object—Consciousness and Existence; Time and Space—Distinction of Elements and Aspects; Presentative and Representative; Redintegration; Conception; Connexion of Metaphysic and Ethic.

Lorenz Oken. A Biographical Sketch. By Alexander Ecker, Professor of Anatomy and Comparative Anatomy in the University of Freiburg, Baden. With Explanatory Notes, Selections from Oken's Correspondence and a Portrait. From the German by Alfred Tulk. London: Kegan Paul, Trench, 1883. Pp. xxiv., 183.

The biographical sketch worked up into this volume was read before the fifty-second meeting of the German Association for the Advancement of Science in 1879, in celebration of the centenary of Oken's birth. It gives a sufficient account of his scientific and practical activity; his philosophical ideas, such as they were, are left mostly in shadow. In the Correspondence appended are

a number of letters from Oken to Schelling with two or three replies, all interesting but hardly touching on philosophy.

The Reformation of the 16th Century in its Relation to Modern Thought and Knowledge. "Hibbert Lectures" delivered at Oxford and in London in April, May, and June, 1883. By Charles Beard, B.A. London: Williams & Norgate, 1883. Pp. 451.

The Reformation, in these careful and interesting Lectures, being understood, at its widest, as a general movement of the human spirit, the author includes within his survey an intelligent view of the philosophical as well as scientific thought of modern times.

Dynamic Sociology, or Applied Social Science as based upon Statical Sociology and the Less Complex Sciences. By Lester F. Ward, A.M. 2 Vols. New York: Appleton, 1883. Pp. xx., 606; vii., 690.

This is an ambitious but also an important work. According to the author, Sociology has been advanced by the school of Mill and Spencer, beyond the purely statical stage, no further than "the passively dynamic stage which recognises only the changes wrought by Nature, unaided by Art; but, before the science of society can be truly founded, another advance must be made, and the actively dynamic stage reached, in which social phenomena shall be contemplated as capable of intelligent control by society itself in its own interest". This further advance he essays in Vol. ii. After a General Introduction and an Historical Review of the Positive Philosophy of Comte and the Synthetic Philosophy of Mr. Spencer, Vol. i. is taken up with an exposition of the Cosmical Principles underlying Social Phenomena: one pervading "Law of Aggregation" being traced as it determines (1) Cosmogeny, (2) Biogeny, Psychogeny, and Anthropogeny, (3) Sociogeny (involving Statical and Passively Dynamical Sociology). While going the whole length of the later evolutionary school, the author, before making his own advance, brings into prominence the earlier achievement of Comte, and has much sympathy with the general intellectual position of the positivist philosopher. Otherwise, off the line of English thought, he concerns himself almost exclusively to Kant. There is much acute psychological observation to be found at different stages of the argument in both volumes, and the properly sociological views are marked by great vigour and independence of spirit.

The Yoga Aphorisms of Patanjali with the Commentary of Bhoja Rája and an English Translation. By Rájendralála Mitra, LL.D., C.I.E. Published by the Asiatic Society of Bengal. Calcutta: Baptist Mission Press, 1883. Pp. cxxvi., 227.

The translator prefixes to his work an elaborate Preface (pp. iii.-xcii.), and Index (pp. xciii.-cxxi.). He comes to the conclusion that the Yoga text-book is posterior to the Sánkhya text-book of Kapila, and that both are later than Buddha, but that the *doctrines* of the two schools are very old. They "are the immediate ancient Hindu archetypes of the nihilist theory of Buddha and indirectly of the pessimism of Schopenhauer and Hartmann. The Yoga, moreover, is the archetype of another modern doctrine, that of spiritualism with its occult appendage." Bhoja, the author of the Commentary, is supposed by the translator to have been a king of Dhárá in the 10th century. He has this interesting passage at the close of his Preface:—

"When I undertook the task [of translation] I had hopes of reading the work with the assistance of a professional Yogí; but I have been disappointed. I could find no Pandit in Bengal who had made Yoga the special subject of his study, and the only person I met at Benares who could help me was most exorbitant in his demands. He cared not for the world and its wealth, and the only condition under which he would teach me was strict pupilage under Hindu rules—living in his hut and ever following his footsteps—to which I would not submit. I had, therefore, to depend on my own knowledge of the Sanskrit language to arrive at the meaning of Patañjali, availing myself, &c."

The Sanskrit text of Yoga-sútra and its Commentary is appended.

Éléments de Psychophysique générale et spéciale. Par J. Delboeuf, Professeur à l'Université de Liège. Paris: Germer Baillière, 1883. Pp. 256.

The distinguished author has happily been moved to begin, under the general heading of "Questions of Philosophy and Science," a collection of his scattered philosophical writings—all of them inspired with the idea "of applying to the philosophical sciences the proceedings and results of the exact and the natural sciences". The present volume contains the substance of his two well-known memoirs on Psychophysics—*Mesure des Sensations de Lumière et Fatigue* and *Théorie générale de la Sensibilité*—dating from ten years back. He has omitted a considerable part of the mathematical discussions, retaining only the absolutely indispensable formulæ, for the understanding of which an elementary knowledge of algebra is sufficient; most of the tables of experiments are also left aside. Between the two memoirs, pp. 109-44, is included a reprint of a correspondence in which MM. Tannery and Ribot and Prof. Wundt took part with the author, in 1875, on the subject of Fechner's law.

Grundzüge der Metaphysik. Dictate aus den Vorlesungen von Hermann Lotze. Leipzig: Hirzel, 1883. Pp. 94.

After this seventh piece in the issue of Lotze's notes for dictation in lecture, there remains but one to come, on Æsthetic. The present *Outlines of Metaphysic* falls, after an Introduction,

into three parts: Ontology, Cosmology, Phaenomenology; the last head treating of the Subjectivity of Knowing and the Objectivity of Knowledge.

Der Rassenkampf. Sociologische Untersuchungen von Dr. Ludwig Gumplowicz, Professor der Staatswissenschaften an der k. k. Universität in Graz. Innsbruck: Wagner, 1883. Pp. 376.

The author adopts the name Sociology for the "great science of the future" which might rather, but for the danger of misunderstanding, be called the Natural History of Man. In five divisions—Philosophy of History and Sociology, *Polygenismus*, Original Multiplicity of Languages and Cults, Natural Process of History, Historical Indications—he contends for an initial plurality of human stocks and finds the explanation of history in their mutual conflict. The general conclusion to which he finally comes is that there is no such thing as either progress or regress in the course of history taken as a whole, but only in the particular periods of a process that is going on for ever in a circle, —in particular countries where the social process is for ever recommencing. At each time and place there is a beginning of development, a culminating point and then of necessity a decline.

Fallacies: A View of Logic from the Practical Side. ("International Scientific Series"). By Alfred Sidgwick. London: Kegan Paul, Trench, 1883. Pp. 363.

The author sends the following:—

"The direct aim of this *presently forthcoming* volume is to help the general reader to a connected view of logical doctrines in relation to the detection of Fallacy; but it is also hoped that such a treatment may be of service indirectly towards justifying, on the plea of practical needs alone, certain views of the general theory of knowledge that have been current in England since the time of Mill, and that have possibly been sometimes stretched beyond their legitimate scope.

"The chief points are:—(1) the consistent separation of the two distinct purposes, Inference (or Discovery), and Proof; (2) the treatment of Propositions as asserting a *relation* between two subjects or things named; the words in which a proposition is expressed being not themselves the proposition, but rough guides to its real content; (3) the use made of the relation of *Indication*, the forward movement in 'real' propositions consisting always in setting up the known as sign or mark of the inferrible, and an asserted *nota rei* demanding always the indication of an admitted sign behind it; (4) the recognition that names of special fallacies, to be applicable in practice, presuppose a knowledge of the *cause* of error in the individual case; and therefore that, in order to avoid unjust accusations, we must fall back upon *Reductio ad absurdum*,—this method itself being used, however, not as claiming that an absurdity is present, but interrogatively and as fixing the assertor in a dilemma: either he may lack any sign asserted as trustworthy, or he may set up a sign whose asserted trustworthiness is open to more or less objection."

IX.—MISCELLANEOUS.

Mr. James Sully has finished a treatise, under the title of *Outlines of Mental Science, with their Application to Education*, in which he aims at going briefly over the whole field of mental development, though a large portion of the book is naturally occupied with the first department, the growth of Intellect. It is intended as an introduction to psychology which may be useful to students generally. At the same time it seeks to be practical, and in separate sections appended to each chapter indicates the main bearings of the principles expounded on the art of Education. Finally, while written specially for beginners and those who do not need to advance into the more arduous regions of psychological speculation, the work endeavours, as far as possible, to guide the more ambitious student by help of special paragraphs and references. The author has not desired to make a new contribution to the science, so much as to present the results of modern research in a clear and concise form. No book, however, in psychology can be wholly devoid of that measure of novelty which comes from the writer's peculiar way of regarding and approaching his subject. The writer hopes that in all that concerns speciality of treatment he may have succeeded in combining the simplicity and clearness which belong to popular exposition with the thoroughness and exactness which are inseparable from science. The volume will probably appear in November.

The fourth session of the Aristotelian Society which closed in June last, was devoted chiefly to a study of Kant's *Critique of Pure Reason*, and the result was satisfactory enough to encourage the Society to pursue a similar course of work during the ensuing fifth session when the authors to be studied will be Berkeley and Hume. The session will open on Oct. 15th, at 8, John Street, Adelphi, W.C., at 7·30 P.M., when the President, Mr. Shadworth H. Hodgson, will deliver an address on "The Two Senses of Reality". The meetings will be continued thereafter fortnightly. A few meetings will be given to original communications on philosophical subjects, but the chief work will be the study of Berkeley's *Theory of Vision* and *Principles of Knowledge*, and Hume's *Treatise of Human Nature*. Applications for admission to the opening meeting, or for further particulars, should be addressed to the Honorary Secretary, Dr. Senier, 1, Bloomsbury Square, W.C.

We have received Parts II. and III. of the *Proceedings of the Society for Psychical Research* (Trübner). These include, besides a second Address by the President (Mr. H. Sidgwick), chiefly replying to critics, second and third reports on Thought-transference (with illustrations), a preliminary and a first report of the Reichenbach Committee, first report on Haunted Houses, a long report of

the Literary Committee, and first report on Mesmerism, with some other papers. A new mode of 'Thought-transference' (substituted for the name of 'Thought-reading' used in Part I.) is brought forward, in which a 'percipient' has been found able to make rough approximations to line-drawings which an 'agent' keeps before his mind, without previous collusion or, so far as appears under all possible precautions, any kind of sensible communication between them. At the same time it is mentioned that the percipient power of the Creery girls recorded in Part I., and also in these Parts, seems to be passing away. The Reichenbach Committee has found three 'sensitives' who appear to see light-forms in connexion with the poles of an electro-magnet. With Braid's method of hypnotising the Committee on Mesmerism seems to have had little or no success, but noteworthy evidence is given of anaesthesia in 'subjects' put into the trance-state by a special operator—the same person, by the way, who is one of the Reichenbach 'sensitives' and who manifests the novel power of picture-drawing.

The Knightsbridge Professorship of Moral Philosophy at Cambridge is vacant by the death, in July, of the Rev. T. R. Birks, who held it from 1872, but for some years back was disabled by illness from lecturing.

Mr. Andrew Seth has been appointed Professor of Logic and Mental and Moral Philosophy in the newly founded University College of South Wales and Monmouth, at Cardiff.

Mr. Henry Sidgwick is revising his *Methods of Ethics* for a third edition, which will appear before long.

The Journal of Speculative Philosophy.—Vol. XVII. No. 1. G. H. Howison—Some Aspects of recent German Philosophy. H. K. H. Delff—Faith and Knowledge (trans.). J. Dewey—Knowledge and the Relativity of Feeling. E. P. Peabody—Primeval Man. Notes and Discussions. Book Notices.

Revue Philosophique.—VIIIme Année, No. 7. C. Lévêque—L'esthétique musicale en France : iv. Étendue et limites psychologiques de l'expression instrumentale. A. Fouillée—Causalité et liberté. P. Souriau—Les sensations et les perceptions (i.). Analyses, &c. Notices bibliographiques, &c. No. 8. E. v. Hartmann—L'école de Schopenhauer. P. Souriau—Les sensations et les perceptions (fin). Ch. Bénard—Le problème de la division des arts dans son développement historique. Revue générale (Th. Ribot — Contributions à la psychologie des mouvements, d'après Stricker). Analyses, &c. Rev. des Period. Correspondance (J. Delboeuf —Note rectificative d'une assertion de Fechner).

La Critique Philosophique.—XIIme Année, Nos. 20—31. F. Pillon —Quatre anciens manuels ou catéchismes d'instruction morale et civique (20) ; Le catéchisme impérial (24, 25) ; A propos de la notion de nombre (25, 27, 28, 29). C. Renouvier—Politique et socialisme : xiv. La philosophie de Fourier (21, 28, 29) ; Les arguments psychologiques pour et contre le libre arbitre (22, 23, 24, 26, 30). F. Grindelle—Les petits traités d'éducation morale et civique. J. Berthoud—Un esprit pur pourrait-il acquerir l'idée de fraction ? (Réponse par F. Pillon).

La Filosofia delle Scuole Italiane.—Vol. XXVII. Disp. 1. F. Bertinaria—Fondamenti filosofici della scienza politica (ii.). A. Macchia—Pensieri di filosofia (i.). R. Bobba—Il problema di conoscenza secondo l'empirismo fisiologico e la filosofia sperimentale di Aristotele (i.). P. Ragnisco—Il principio di contraddizione in Hegel. L. Ferri—Il fenomeno nelle sue relazioni con la sensazione e l'oggetto. T. Mamiani—Del senso morale e del libero arbitrio. Bibliografia, &c. Disp. 2. P. Ragnisco—Il principio di contraddizione in Herbart. A. Macchia—Pensieri di filosofia (ii.). R. Bobba—Il problema di conoscenza secondo l'empirismo, &c. (ii.). T. Mamiani—Opere edite ed inedite di A. Rosmini Serbati. Bibliografia.

Rivista di Filosofia Scientifica.—An. II. No. 4. T. Vignoli—L'eredità dell' indole morale, secondo la dottrina generale dell' evoluzione. . . . E. Ferri—Studi di psicologia comparata: Le uccisioni criminose tra gli animali. . . . G. Buccola—Sulla durata delle percezioni olfattive, nota di psicologia sperimentale. . . . Riv. Anal. (J. Lubbock, *Ants, Bees and Wasps)*, &c. No. 5. . . . E. Kraepelin—La colpa e la pena: i. Il concetto scientifico della colpa. G. Sergi—La stratificazione del carattere e la delinquenza. . . . Riv. Sint. (F. Puglia—L'idea del diritto nella filosofia scientifica). &c. No. 6. E. Kraepelin—La colpa e la pena: i. Il concetto scientifico della colpa. L. Paolucci—Studi di psicologia comparata: Il linguaggio degli uccelli. ii. Sull' espressione psichica delle voci usate dagli uccelli. . . . Riv. Sint. (G. Buccola—Le illusioni della memoria). Riv. Anal. &c.

Zeitschrift für Philosophie, &c.—Bd. LXXXIII. Heft. 1. M. Sartorius—Die Entwicklung der Astronomie bei den Griechen bis Anaxagoras u. Empedokles, in besonderem Anschluss an Theophrast (ii.). P. Hohlfeld—Mathematik u. Philosophie. H. Sachtler—Ueber den Raum- u. Zeitbegriff. J. Nathan—Die imaginären Begriffe. L. Weis—Der Glaube an die Atome u. der Streit über die metaphysischen u. chemischen Atome. E. Dreher—Antikritik. Recensionen (J. Veitch, *Hamilton;* A. Bain, *James Mill* and *John Stuart Mill;* A. Seth, *The Development from Kant to Hegel;* J. Watson, *Schelling's Transcendental Idealism;* J. Martineau, *A Study of Spinoza;* J. M'Cosh, *Criteria of Diverse Kinds of Truth;* E. Wallace, *Aristotle's Psychology*, &c.). F. Kirchner—Erklärung. Bibliographie.

Philosophische Monatshefte.—Bd. XIX. Heft 6, 7. F. Staudinger—Noch einmal Kant's synthetische Einheit der Apperception. B. Münz—Locke's Ethik. J. Baumann—Nochmals "Wundt's Lehre vom Willen u. sein animistischer Monismus". H. Vaihinger—Eine angebliche Widerlegung der "Blattversetzung" in Kant's *Prolegomena.* Recensionen. Literaturbericht, &c. Heft 8. E. Feuerlein—Kant u. der Pietismus. E. v. Hartmann—In welchem Sinne war Kant ein Pessimist? Recensionen u. Anzeigen. Literaturbericht. Bibliographie, &c.

Vierteljahrsschrift für wissenschaftliche Philosophie.—Das kategoriale Gepräge des Denkens in seinem Einflusse auf die Probleme der Philosophie, insbesondere der Erkenntnisstheorie. H. Höffding—Die psychologische Bedeutung der Wiederholung. R. Seydel—Raum, Zeit, Zahl. F. Tönnies—Studie zur Entwicklungsgeschichte des Spinoza (ii., Schluss). Anzeigen. Selbstanzeigen, &c.

Other Books, &c., received: J. R. Nichols, *Whence, What, Where? A View of the Origin, Nature and Destiny of Man*, 4th Ed., revised, Boston (Williams), London (Trübner), pp. 198. John Fiske, *Evolution and Religion*, London (Foulger), pp. 12. G. V. Papale, *Darwinismo naturale, Darwinismo sociale*, Roma (Loescher), pp. 420.

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